```
1-2  1-6  2-3  3-4  4-5  5-6  5-7  6-9  7-8  8-9  11-12  11-16  12-13  13-14  14-15
 15-16
exact/norm bonds :
1-2  1-6  1-10  2-3  3-4  4-5  5-6  5-7  7-8
exact bonds :
6-9  8-9
normalized bonds :
11-12  11-16  12-13  13-14  14-15  15-16
isolated ring systems :
containing 1 : 11 :


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:CLASS
11:Atom  12:Atom  13:Atom  14:Atom  15:Atom  16:Atom  18:Atom



L1      STRUCTURE UPLOADED

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L1              STR
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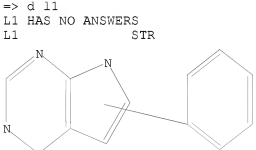


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Structure attributes must be viewed using STN Express query preparation.


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SAMPLE SEARCH INITIATED 09:40:36 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      918 TO ITERATE

100.0% PROCESSED      918 ITERATIONS                                 12 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:        16543 TO    20177
PROJECTED ANSWERS:             33 TO      447

L2           12 SEA SSS SAM L1

=> s l1 sss full
FULL SEARCH INITIATED 09:40:42 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -    17836 TO ITERATE
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100.0% PROCESSED 17836 ITERATIONS 359 ANSWERS
SEARCH TIME: 00.00.01

L3 359 SEA SSS FUL L1

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COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	191.54	191.76

FILE 'CAPLUS' ENTERED AT 09:40:47 ON 13 APR 2010
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FILE COVERS 1907 - 13 Apr 2010 VOL 152 ISS 16
FILE LAST UPDATED: 12 Apr 2010 (20100412/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2010
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2010

CAplus now includes complete International Patent Classification (IPC) reclassification data for the first quarter of 2010.

CAS Information Use Policies apply and are available at:

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3
L4 69 L3

=> d ibib abs hitstr tot

L4 ANSWER 1 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2010:139427 CAPLUS
DOCUMENT NUMBER: 152:278628
TITLE: Identification, SAR Studies, and X-ray Co-crystallographic Analysis of a Novel Furanopyrimidine Aurora Kinase A Inhibitor
AUTHOR(S): Cheung, Mehane Selwasia; Tsai, Ming-Tsung; Chu, Chang-Ping; Ong, Ching-Jiou; Lin, Wen-hsing; Chang, Chun-Yao; Chang, Tsung-Yun; Leou, Jim-Shyong; Teng, Chi-Hsing; Wu, Jiun-Long; Fang, Ming-Yu; Chen, Chun-Hsu; Hsu, John T.-A.; Wu, Su-Ying; Chen, Yu-Sheng; Hsieh, Hsing-Pang
CORPORATE SOURCE: Division of Biotechnology and Pharmaceutical Research, National Health Research Institutes, Taichung, 350, Taiwan
SOURCE: ChemMedChem (2010), 5(2), 255-267 CODEN: CHEMGA; ISSN: 1860-7179
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
OS

I

AB Herein we reveal a simple method for the identification of novel Aurora kinase A inhibitors through substructure searching of an inhouse compound library to select compds. for testing. A hydrazone fragment conferring Aurora kinase activity and heterocyclic rings most frequently reported in kinase inhibitors were used as substructure queries to filter the inhouse compound library collection prior to testing. Five new series of Aurora kinase inhibitors were identified through this strategy, with IC50 values ranging from .apprx.900 nM to .apprx.15 nM, by testing only 133 compds. from a database of .apprx.125 000 compds. Structure-activity relationship studies and X-ray co-crystallog. anal. of the most potent compound, 8 (I), a furanopyrimidine derivative with an IC50 value of 309 nM toward Aurora kinase A, were carried out. The knowledge gained through these studies could help in the future design of potent Aurora kinase inhibitors.
IT 173458-79-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(furanopyrimidines as Aurora kinase A inhibitors)
RN 173458-79-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,6-diphenyl-7-(phenylmethyl)- (CA INDEX NAME)

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2009:1418713 CAPLUS
DOCUMENT NUMBER: 152:51204
TITLE: Structure-Based Design of Pteridine Reductase Inhibitors Targeting African Sleeping Sickness and the Leishmaniasis
AUTHOR(S): Tulloch, Lindsay B.; Martini, Viviane P.; Iuliano, Jorge; Huggan, Judith K.; Lee, Jeong Kyu; Gibson, Colin L.; Smith, Terry K.; Suckling, Colin J.; Hunter, William N.
CORPORATE SOURCE: Division of Biological Chemistry and Drug Discovery, College of Life Sciences, University of Dundee, Dundee, DD1 5EH, UK
SOURCE: Journal of Medicinal Chemistry (2010), 53(1), 221-229 CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Pteridine reductase (PTR1) is a target for drug development against Trypanosoma and Leishmania species, parasites that cause serious tropical diseases and for which therapies are inadequate. The authors adopted a structure-based approach to the design of novel PTR1 inhibitors based on three mol. scaffolds. A series of compds., most newly synthesized, were identified as inhibitors with PTR1-species specific properties explained by structural differences between the T. brucei and L. major enzymes. The most potent inhibitors target T. brucei PTR1, and two compds. displayed antiparasite activity against the bloodstream form of the parasite. PTR1 contributes to antifolate drug resistance by providing a mol. bypass of dihydrofolate reductase (DHFR) inhibition. Therefore, combining PTR1 and DHFR inhibitors might improve therapeutic efficacy. The authors tested two new compds. with known DHFR inhibitors. A synergistic effect was observed for one particular combination highlighting the potential of such an approach for treatment of African sleeping sickness.
IT 1160570-09-1 1160570-10-4
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(structure-based design of pteridine reductase inhibitors targeting African sleeping sickness and the leishmaniasis and combination with dihydrofolate reductase inhibitors)
RN 1160570-09-1 CAPLUS
CN 3H-pyrrolo[2,3-d]pyrimidine-5-carbonitrile, 2-amino-4,7-dihydro-4-oxo-6-phenyl- (CA INDEX NAME)

RN 1160570-10-4 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-5-carbonitrile,

L4 ANSWER 1 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(Reactant or reagent)

L4 ANSWER 2 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
2-amino-4,7-dihydro-6-(4-methoxyphenyl)-4-oxo- (CA INDEX NAME)

IT 1160570-13-7
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(structure-based design of pteridine reductase inhibitors targeting African sleeping sickness and the leishmaniasis and combination with dihydrofolate reductase inhibitors)
RN 1160570-13-7 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-5-carbonitrile, 2-amino-4-(3-formylphenyl)-4,7-dihydro-4-oxo- (CA INDEX NAME)

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:865255 CAPLUS
DOCUMENT NUMBER: 151:337149
TITLE: Synthesis of certain pyrrole derivatives as antimicrobial agents
AUTHOR(S): Mohamed, Mosaad Sayed; El-Domany, Randan Ahmed; Abd El-Hameed, Rania Helmy
CORPORATE SOURCE: Organic Chemistry Department, Faculty of Pharmacy, Helwan University, Cairo, Egypt
SOURCE: Acta Pharmaceutica (Zagreb, Croatia) (2003), 53(2), 145-158
CODEN: APZAFK; ISSN: 1330-0075
PUBLISHER: Croatian Pharmaceutical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 151:337149
AB In an effort to establish new pyrroles and pyrrolo[2,3-d]pyrimidines with improved antimicrobial activity we report here the synthesis and in vitro microbiol. evaluation of a series of pyrrole deriva. A series of new 2-aminopyrrole-3-carbonitriles were synthesized from the reaction of benzoyl, primary arom. amines and malononitrile, from which a number of pyrrole derivs. and pyrrolo[2,3-d]pyrimidines were synthesized. The in vitro antimicrobial testing of the synthesized compds. was carried out against Gram-pos., Gram-neg. bacteria and fungi. Some of the prepared compds., [2-amino-1-(2-methylphenyl)-4,5-diphenyl-1H-pyrrole-3-carbonitrile], [2-amino-5-carbamoyl-1-(5-methylphenyl)-4,5-diphenyl-1H-pyrroles, N-(3-cyano-1-(2-methylphenyl)-4,5-diphenyl-1H-pyrrol-2-yl)-acetamides, N-(3-cyano-1-(3-methylphenyl)-4,5-diphenyl-1H-pyrrol-2-yl)-acetamides, 2-amino-1-(4-methoxyphenyl)-4,5-diphenyl-3-tetrazole-1H-pyrroles, 7-(4-methoxyphenyl)-5,6-diphenyl-7H-pyrrolo[2,3-d]pyrimidin-4(3H)-ones, 7-(3-methylphenyl)-5,6-diphenyl-7H-pyrrolo[2,3-d]pyrimidin-4(3H)-thione and N-(7-(2-methylphenyl)-5,6-diphenyl-7H-pyrrolo[2,3-d]pyrimidine-4-yl amines] showed potent antimicrobial activity.
IT 175346-02-9 1186242-57-8P 1186242-58-9P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and antimicrobial activity of pyrrole derivs. and pyrrolo[2,3-d]pyrimidines)
RN 175346-02-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3,6,7-triphenyl- (CA INDEX NAME)

L4 ANSWER 3 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 1186242-57-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(3-methylphenyl)-5,6-diphenyl- (CA INDEX NAME)

RN 1186242-58-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(4-methoxyphenyl)-5,6-diphenyl- (CA INDEX NAME)

IT 1186242-56-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and antimicrobial activity of pyrrole derivs. and pyrrolo[2,3-d]pyrimidines)
RN 1186242-56-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(2-methylphenyl)-5,6-diphenyl- (CA INDEX NAME)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2009:848214 CAPLUS
DOCUMENT NUMBER: 151:92851
TITLE: Method using lifespan-altering compounds for altering the lifespan of eukaryotic organisms, and screening for such compounds
INVENTOR(S): Goldfarb, David Scott
PATENT ASSIGNEE(S): University of Rochester, USA
SOURCE: U.S. Pat. Appl. Publ., 57pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20090163545	A1	20090625	US 2008-341615		20081222
US 20090163545	A1	20090625	US 2008-341615		20081222
PRIORITY APPLN. INFO.:			US 2008-238019	P	20080125
			US 2007-163629	P	20071221
			US 2008-341615		20081222

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB The invention discloses a method for altering the lifespan of a eukaryotic organism. The method comprises the steps of providing a lifespan-altering compound, and administering an effective amount of the compound to a eukaryotic organism, such that the lifespan of the organism is altered. In one embodiment, the compound is identified using the DeaD assay. [This abstract record is one of 20 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]
IT 220823-17-4
RL: PAC (Pharmacological activity); BIOL (Biological study)
(method using lifespan-altering compds. for altering lifespan of eukaryotic organisms, and screening for such compds.)
RN 220823-17-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(4-methoxybenzyl)-5-phenyl- (CA INDEX NAME)

L4 ANSWER 4 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

L4 ANSWER 5 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2009:946109 CAPLUS
DOCUMENT NUMBER: 151:92845
TITLE: Method using lifespan-altering compounds for altering the lifespan of eukaryotic organisms, and screening for such compounds
INVENTOR(S): Goldfarb, David Scott
PATENT ASSIGNEE(S): University of Rochester, USA
SOURCE: U.S. Pat. Appl. Publ., 57pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20090163545	A1	20090625	US 2008-341615		20081222
US 20090163545	A1	20090625	US 2008-341615		20081222
PRIORITY APPLN. INFO.:			US 2008-238019P	P	20080125
			US 2007-163629P	P	20071221
			US 2008-341615		20081222

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB The invention discloses a method for altering the lifespan of a eukaryotic organism. The method comprises the steps of providing a lifespan-altering compound, and administering an effective amount of the compound to a eukaryotic organism, such that the lifespan of the organism is altered. In one embodiment, the compound is identified using the DeaD assay. [This abstract record is one of 20 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]
IT 965146-58-3
RL: PAC (Pharmacological activity); BIOL (Biological study)
(method using lifespan-altering compds. for altering lifespan of eukaryotic organisms, and screening for such compds.)
RN 965146-58-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(3-methylphenyl)-5-phenyl-
(CA INDEX NAME)

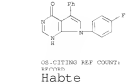
L4 ANSWER 5 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

L4 ANSWER 6 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(3 CITINGS)

L4 ANSWER 6 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2009:946105 CAPLUS
DOCUMENT NUMBER: 151:92842
TITLE: Method using lifespan-altering compounds for altering the lifespan of eukaryotic organisms, and screening for such compounds
INVENTOR(S): Goldfarb, David Scott
PATENT ASSIGNEE(S): University of Rochester, USA
SOURCE: U.S. Pat. Appl. Publ., 57pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20090163545	A1	20090625	US 2008-341615		20081222
US 20090163545	A1	20090625	US 2008-341615		20081222
PRIORITY APPLN. INFO.:			US 2008-238019P	P	20080125
			US 2007-163629P	P	20071221
			US 2008-341615		20081222

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB The invention discloses a method for altering the lifespan of a eukaryotic organism. The method comprises the steps of providing a lifespan-altering compound, and administering an effective amount of the compound to a eukaryotic organism, such that the lifespan of the organism is altered. In one embodiment, the compound is identified using the DeaD assay. [This abstract record is one of 20 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]
IT 243843-93-2
RL: PAC (Pharmacological activity); BIOL (Biological study)
(method using lifespan-altering compds. for altering lifespan of eukaryotic organisms, and screening for such compds.)
RN 243843-93-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-fluorophenyl)-3,7-dihydro-5-phenyl-
(CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

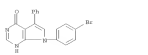
L4 ANSWER 7 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2009:946102 CAPLUS
DOCUMENT NUMBER: 151:92839
TITLE: Method using lifespan-altering compounds for altering the lifespan of eukaryotic organisms, and screening for such compounds
INVENTOR(S): Goldfarb, David Scott
PATENT ASSIGNEE(S): University of Rochester, USA
SOURCE: U.S. Pat. Appl. Publ., 57pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20090163545	A1	20090625	US 2008-341615		20081222
US 20090163545	A1	20090625	US 2008-341615		20081222
PRIORITY APPLN. INFO.:			US 2008-238039P	P	20080125
			US 2007-163629P	P	20071221
			US 2008-341615		20081222

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB The invention discloses a method for altering the lifespan of a eukaryotic organism. The method comprises the steps of providing a lifespan-altering compound, and administering an effective amount of the compound to a eukaryotic organism, such that the lifespan of the organism is altered. In one embodiment, the compound is identified using the DauD assay. [This abstract record is one of 20 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.)
IT 220835-18-7
RL: PAC (Pharmacological activity); BIOL (Biological study)
(method using lifespan-altering compds. for altering lifespan of eukaryotic organisms, and screening for such compds.)
RN 220835-18-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-bromophenyl)-3,7-dihydro-5-phenyl- (CA INDEX NAME)

L4 ANSWER 7 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L4 ANSWER 8 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2009:946150 CAPLUS
DOCUMENT NUMBER: 151:92837
TITLE: Method using lifespan-altering compounds for altering the lifespan of eukaryotic organisms, and screening for such compounds
INVENTOR(S): Goldfarb, David Scott
PATENT ASSIGNEE(S): University of Rochester, USA
SOURCE: U.S. Pat. Appl. Publ., 57pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20090163545	A1	20090625	US 2008-341615		20081222
US 20090163545	A1	20090625	US 2008-341615		20081222
PRIORITY APPLN. INFO.:			US 2008-238039P	P	20080125
			US 2007-163629P	P	20071221
			US 2008-341615		20081222

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB The invention discloses a method for altering the lifespan of a eukaryotic organism. The method comprises the steps of providing a lifespan-altering compound, and administering an effective amount of the compound to a eukaryotic organism, such that the lifespan of the organism is altered. In one embodiment, the compound is identified using the DauD assay. [This abstract record is one of 20 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]
IT 863544-62-7
RL: PAC (Pharmacological activity); BIOL (Biological study)
(method using lifespan-altering compds. for altering lifespan of eukaryotic organisms, and screening for such compds.)
RN 863544-62-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(4-methylphenyl)-5-phenyl- (CA INDEX NAME)

L4 ANSWER 8 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

L4 ANSWER 9 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2009:783755 CAPLUS
DOCUMENT NUMBER: 151:124018
TITLE: Preparation of pyrrolo[2,3-d]pyrimidine derivatives as
CGRP receptor antagonists
INVENTOR(S): Nicholls, Paula Louise; Sehmi, Sanjeet Singh; Ward, Robert William; Wilson, David Matthew
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 156pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009094062	A1	20090702	WO 2008-EP67823	20081218

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: GB 2007-25103 A 20071221

OTHER SOURCE(S): MARPAT 151:124018
GI

AB The title compds. I and II [R1 = H, acetyl, amino, etc.; R2 = (un)substituted aryl; n = 0-2; R3 and R4 together form (un)substituted fused 6-membered aromatic ring containing 0-2 N atoms] that are CGRP receptor
antagonists which are useful in the treatment of migraine, headache, and cluster headache, were prepared. E.g., a multi-step synthesis of III, starting from 7H-pyrrolo[2,3-d]pyrimidine, was given. Exemplified compds.
I were tested in CRLR-RAMP1 cAMP TR-FRET assay and exhibited fpKi values greater than or equal to 6.5. Pharmaceutical composition comprising the compound
I or II is disclosed.
IT 1168106-63-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

L4 ANSWER 10 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2009:693132 CAPLUS
DOCUMENT NUMBER: 151:56797
TITLE: Diversity oriented syntheses of fused pyrimidines designed as potential antifolates
AUTHOR(S): Gibson, Colin L.; Ruggan, Judith P.; Kennedy, Alan; Kiefer, Lionel; Lee, Jeong Kwan; Suckling, Colin J.; Clements, Carol; Harvey, Alan L.; Hunter, William N.; Tulloch, Lindsay B.
CORPORATE SOURCE: WestCHEM, Department of Pure & Applied Chemistry, University of Strathclyde, Glasgow, G1 1XL, UK
SOURCE: Organic & Biomolecular Chemistry (2009), 7(9), 1829-1842
CODEN: OBCRAK; ISSN: 1477-0520
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 151:56797
AB Diversity oriented syntheses of some furo[2,3-d]pyrimidines and pyrrolo[2,3-d]pyrimidines related to folate, guanine, and
diaminopyrimidine-containing drugs have been developed for the preparation of
potential anti-infective and anticancer compds. Amide couplings and Suzuki couplings on the basic heterocyclic templates were used. In the latter case yields being especially high using aromatic trifluoroborates as the
coupling partner. A new rig synthesis of 6-aryl-substituted deazaguanines bearing 2-alkylthio groups has been developed using Michael addition of substituted nitro styrenes. Diversity at C-2 has been introduced
by oxidation and substitution with a range of amino nucleophiles. The chemical
reactivity of these pyrrolopyrimidines with respect to both electrophilic substitution on ring systems and nucleophilic substitution for diversity
is discussed. Several compds. were found to inhibit pteridine reductases from the protozoan parasites Trypanosoma brucei and Leishmania major at the microbedar level and to inhibit the growth of Trypanosoma brucei
in cell culture at higher concns. From these results, significant structural features required for inhibition of this important drug target enzyme have been identified.
IT 1160569-87-7P
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(preparation of furo[2,3-d]pyrimidines and pyrrolo[2,3-d]pyrimidines as
inhibitors of pteridine reductases from protozoan parasites)
RN 1160569-87-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-2-(methylthio)-5-phenyl- (CA INDEX NAME)

L4 ANSWER 9 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(Reactant or reagent)
(prepn. of pyrrolo[2,3-d]pyrimidine derivs. as CGRP receptor
antagonists for treating migraine, headache and cluster headache)
RN 1168106-63-5 CAPLUS
CN 7H-Pyrrolo[2,3-d]pyrimidine-7-acetic acid, 5-(2-chlorophenyl)-1,4-dihydro-4-oxo-, ethyl ester (CA INDEX NAME)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

IT 1160569-86-7P 1160569-87-8P 1160569-88-9P
1160570-09-1P 1160570-10-4P 1160570-11-5P
1160570-19-3P 1160570-20-6P 1160570-21-7P
1160570-22-8P
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of furo[2,3-d]pyrimidines and pyrrolo[2,3-d]pyrazindines as
inhibitors of pteridine reductases from protozoan parasites)
RN 1160569-86-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5-phenyl-2-[(phenylmethyl)amino]- (CA INDEX NAME)

RN 1160569-87-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5-phenyl-2-(1-pyrrolidinyl)- (CA INDEX NAME)

RN 1160569-88-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5-phenyl-2-(phenylamino)- (CA INDEX NAME)

L4 ANSWER 10 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 1160570-69-1 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-5-carbonitrile, 2-amino-4,7-dihydro-4-oxo-6-phenyl- (CA INDEX NAME)

RN 1160570-12-4 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-5-carbonitrile, 2-amino-4,7-dihydro-6-[4-(methoxyphenyl)]-4-oxo- (CA INDEX NAME)

RN 1160570-11-3 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-5-carbonitrile, 2-amino-6-(4-ethylphenyl)-4,7-dihydro-4-oxo- (CA INDEX NAME)

L4 ANSWER 10 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

IT 1160569-74-3P 1160570-23-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of furo[2,3-d]pyrimidines and pyrrolo[2,3-d]pyrimidines as inhibitors of pteridine reductases from protozoan parasites)

RN 1160569-74-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-phenyl-2-[(phenylmethyl)thio]- (CA INDEX NAME)

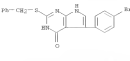
RN 1160570-23-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-2-(methylsulfonyl)-3-phenyl- (CA INDEX NAME)

IT 1160570-13-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of furo[2,3-d]pyrimidines and pyrrolo[2,3-d]pyrimidines as inhibitors of pteridine reductases from protozoan parasites)

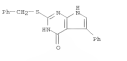
RN 1160570-13-7 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-5-carbonitrile, 2-amino-4-(3-formylphenyl)-4,7-dihydro-4-oxo- (CA INDEX NAME)

L4 ANSWER 10 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

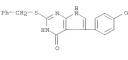
RN 1160570-19-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-[4-bromophenyl]-3,7-dihydro-2-[(phenylmethyl)thio]- (CA INDEX NAME)



RN 1160570-20-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5-phenyl-2-[(phenylmethyl)thio]- (CA INDEX NAME)

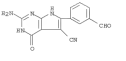


RN 1160570-21-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5-(4-methoxyphenyl)-2-[(phenylmethyl)thio]- (CA INDEX NAME)



RN 1160570-22-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-2-[(phenylmethyl)thio]-5-[2-(trifluoromethyl)phenyl]- (CA INDEX NAME)

L4 ANSWER 10 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

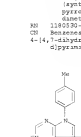
REFERENCE COUNT: 84 THERE ARE 84 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:247555 CAPLUS
DOCUMENT NUMBER: 150:413108
TITLE: Docking, 3D-QSAR studies and in silico ADME prediction on c-Src tyrosine kinase inhibitors
AUTHOR(S): Tintori, Cristina; Magnani, Matteo; Schemone, Silvia; Botta, Maurizio
CORPORATE SOURCE: Dipartimento Farmaco Chimico Tecnologico, Universita degli Studi di Siena, Siena, 2, I-53100, Italy
SOURCE: European Journal of Medicinal Chemistry (2003), 44(3), 990-1000
CODEN: EJMCA5; ISSN: 0223-5234
PUBLISHER: Elsevier Masson SAS
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Docking simulations and three-dimensional quant. structure-activity relationship (3D-QSAR) anal. were performed on a wide set of c-Src inhibitors. The study was conducted using a structure-based alignment and by applying the GRID/GOLPE approach. The present 3D-QSAR investigation proved to be of good statistical value, displaying r 2, q 2 and cross-validation SDEP values of 0.94, 0.84 and 0.42, resp. Moreover, such a model also proved to be capable of predicting the activities of an external test set of compds. The availability of the 3D structure of the target made possible the interpretation of steric and electrostatic maps within the binding site environment and provided useful insight into the structural requirements for inhibitory activity against c-Src. Two regions whose occupation by hydrophobic portions of ligands would favorably affect the activity were clearly identified. Moreover, hydrogen bond interactions involving residues Met343, Asp404 and Ser347 emerged as playing a key role in determining the affinity of the active inhibitors toward c-Src. Furthermore, the inhibitors bearing a basic nitrogen provided enhanced potency through protonation and salt bridge formation with Asp370. A preliminary pharmacokinetic profile of the mols. under anal. was also drawn on the basis of Volsurf predictions.
IT 287177-12-2
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(docking, 3D-QSAR studies and in silico ADME prediction on c-Src tyrosine kinase inhibitors)
RN 287177-12-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,7-diphenyl- (CA INDEX NAME)

L4 ANSWER 11 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2009:142088 CAPLUS
DOCUMENT NUMBER: 151:267012
TITLE: Heterocrematization with sulfenamidophenylethanone, Part I: Synthesis of novel pyrrolo[2,3-d]pyrimidine and pyrrolo[3,2-e][1,2,4]triazolo[1,5-c]pyrimidine derivatives containing dimethylsulfonamide moiety
AUTHOR(S): Hassan, Saber M.; El-Haghraby, Ahmed A.; Abdel Aal, Mahmoud M.; Bashandy, Mahmoud S.
CORPORATE SOURCE: Chemistry Department, Faculty of Science, Al-Azhar University, Nasr City, Cairo, Egypt
SOURCE: Phosphorus, Sulfur and Silicon and the Related Elements (2009), 184(2), 291-308
CODEN: PSSLEY; ISSN: 1042-6507
PUBLISHER: Taylor & Francis, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 151:267012
AB 4-(5-Amino-4-cyano-1-p-tolyl-1H-pyrrol-3-yl)-N,N-dimethylbenzenesulfonamide was prepared and converted to several pyrrolo[2,3-d]pyrimidin-5-yl-N,N-dimethylbenzenesulfonamides. Cyclocondensation of 4-(3-amino-4-imino-7-p-tolyl-4,7-dihydro-3H-pyrrolo[2,3-d]pyrimidin-5-yl)-N,N-dimethylbenzenesulfonamide with different electrophilic carbon reagents afforded several 4-(N,N-dimethylaminosulfonylphenyl)pyrrolo[3,2-e][1,2,4]triazolo[1,5-c]pyrimidines, IR, 1HNMR, and mass spectra of the newly synthesized compds. were recorded. Most of the obtained compds. were screened against Gram-pos. and Gram-neg. bacteria and fungi, for which some of these derive, gave promising results.
IT 1180530-12-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis of pyrrolo[2,3-d]pyrimidines and pyrrolo[3,2-e][1,2,4]triazolo[1,5-c]pyrimidine containing the dimethylsulfonamide moiety)
RN 1180530-12-4 CAPLUS
CN Benzenesulfonamide, 4-[4,7-dihydro-7-(4-methylphenyl)-4-oxo-3H-pyrrolo[2,3-d]pyrimidin-3-yl]-N,N-dimethyl- (CA INDEX NAME)



L4 ANSWER 12 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

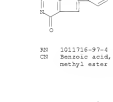
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

GE.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

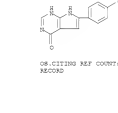
L4 ANSWER 13 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2008:357021 CAPLUS
DOCUMENT NUMBER: 148:355828
TITLE: Multi-functional small molecules as anti-proliferative agents and their preparation
INVENTOR(S): Cai, Xiong; Qian, Changgeng; Gould, Stephen; Zhai, Haixiao
PATENT ASSIGNEE(S): Curis, Inc., USA
SOURCE: PCT Int. Appl., 494pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008037367	A2	20080320	WO 2007-US7971	20070910
WO 2008037367	A9	20080724		
WO 2008037367	A3	20081204		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
AU 2007296744	A1	20080320	AU 2007-296744	20070910
CA 2662937	A1	20080320	CA 2007-2662937	20070910
US 20090221332	A1	20080911	US 2007-852458	20070910
EP 2061772	A2	20090527	EP 2007-842110	20070910
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS				
KR 2009077934	A	20090716	KR 2009-707573	20070910
JP 2010502743	T	20100128	JP 2009-527602	20070910
IN 2009DN02146	A	20090731	IN 2009-DN2146	20090331
CN 101641338	A	20100203	CN 2007-80041808	20090511
PRIORITY APPLN. INFO.:			US 2006-843790P P	20060911
			US 2007-895889P P	20070320
			WO 2007-US7971 W	20070910

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 148:355828
GI

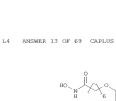


RN 1011716-97-4 CAPLUS
CN Benzoic acid, 4-(4,7-dihydro-4-oxo-3H-pyrrolo[2,3-d]pyrimidin-6-yl)-, methyl ester (CA INDEX NAME)

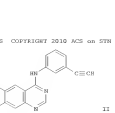


OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L4 ANSWER 13 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



A—B—C I

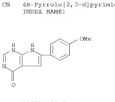


II

AB The invention relates to the compns., methods, and applications of an approach to selective inhibit. of several cellular or mol. targets with a single small mol. More specifically, the present invention relates to multi-functional small mols. of formula I wherein one functionality is capable of inhibiting histone deacetylases (HDAC) and the other functionality is capable of inhibiting a different cellular or mol. pathway involved in aberrant cell proliferation, differentiation or survival. Compds. of formula I wherein A is a pharmacophore of an anticancer agent capable of inhibiting at least one cellular or mol. pathway involved in the aberrant cell proliferation, differentiation or survival; B is a linker; C is a zinc-binding moiety; and their geometrical isomers, enantiomers, diastereoisomers, racemates, pharmaceutically acceptable salts, prodrugs and solvates thereof, are claimed. Example compound II was prepared by a multistep procedure (procedure given). All the invention compds. were evaluated for their antiproliferative activity (some data given).

IT 173458-97-4P 187724-89-6P 1011716-97-4P
RL: RCT (Reactant); SYN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of multi-functional small mols. as antiproliferative agents)

RN 173458-97-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-nitrophenyl)- (CA INDEX NAME)



RN 187724-89-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-nitrophenyl)- (CA INDEX NAME)

L4 ANSWER 14 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2008:353828 CAPLUS
DOCUMENT NUMBER: 148:355814
TITLE: Preparation of (aralkylamino)(phenyl)pyrrolo[2,3-d]pyrimidine derivatives for use as protein tyrosine kinase (PTK) inhibitors
INVENTOR(S): Cai, Xiong; Qian, Changgeng; Gould, Stephen
PATENT ASSIGNEE(S): Curis, Inc., USA
SOURCE: PCT Int. Appl., 123pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008037367	A2	20080320	WO 2007-US7968	20070910
WO 2008037367	A3	20081204		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
US 20080161320	A1	20080703	US 2007-852440	20070910
PRIORITY APPLN. INFO.:			US 2006-843649P P	20060911
			US 2007-895894P P	20070320

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): CASREACT 148:355814; MARPAT 148:355814
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Fused bicyclic pyrimidine derivs. I and II [Ar = aryl, substituted arylheteroaryl or heteroaryl; Q = absent or (un)substituted alkyl; X = O, S, NR, or alkylamino; Z = O, S, NR1; Y = N or CR2; R = linker; Z = C(O)NHZ, NHC(S)CHZ, CHC(O)NHaryl, etc.; R1 = H or (un)substituted alkyl; R2 = H, halo, (un)substituted aliphatic, aryl or heteroaryl], and their pharmaceutically acceptable salts, are prepared and disclosed as protein tyrosine kinase (PTK) inhibitors. Thus, e.g., III was prepared by N-alkylation of 1,4-dioxa-8-azaspiro[4.5]decane with 6-(4-(chloromethyl)phenyl)-N-((R)-1-phenylethyl)-7H-pyrrolo[2,3-d]pyrimidin-4-amine (preparation given) and deprotection followed by condensation with 6-aminohexanoic acid Me ester and amidation with hydroxylamine. Select I were evaluated in EGFR assays, e.g., III demonstrated an IC50 value of <0.1 μM).

L4 ANSWER 14 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
IT 177458-97-4, 4-(4-Methoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ol 187724-89-6, 4-(4-Nitrophenyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ol 1013716-97-4, Methyl 4-(4-hydroxy-7H-pyrrolo[2,3-d]pyrimidin-6-yl)benzoate
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of (aralkylamino)(phenyl)pyrrolopyrimidine derivs. for use as
protein tyrosine kinase (PTK) inhibitors)
RN 177458-97-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7,7-dihydro-6-(4-methoxyphenyl)- (CA INDEX NAME)

RN 187724-89-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7,7-dihydro-6-(4-nitrophenyl)- (CA INDEX NAME)

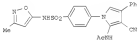
RN 1013716-97-4 CAPLUS
CN Benzoic acid, 4-(4,7-dihydro-4-oxo-3H-pyrrolo[2,3-d]pyrimidin-6-yl)-, methyl ester (CA INDEX NAME)

L4 ANSWER 14 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

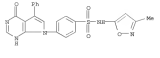
L4 ANSWER 15 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2009:223153 CAPLUS
DOCUMENT NUMBER: 150:98075
TITLE: Computer-based ligand design and synthesis of some new sulfonamides bearing pyrrole or pyrrolopyrimidine moieties having potential antitumor and radioprotective activities
AUTHOR(S): Ghorab, Mostafa M.; Heiba, Helmy I.; Khalil, Amira I.; Abou El Ella, Dalal A.; Noaman, Enan
CORPORATE SOURCE: Department of Drug Radiation Research, National Center for Radiation Research and Technology (NCRRT), Nasr City, Cairo, Egypt
SOURCE: Phosphorus, Sulfur and Silicon and the Related Elements (2008), 183(1), 90-104
CODEN: PSSLEC; ISSN: 1042-6507
PUBLISHER: Taylor & Francis, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 150:98075
GI



AB A series of new pyrrole and pyrrolo[2,3-d]pyrimidine derivs. was designed, synthesized, and biol. evaluated for their in vitro cytotoxic activity. The design of these compds. was based upon the mol. modeling simulation of the fitting values and conformational energy values of the best-fitted conformers to VEGFR2 inhibitors hypothesis. This hypothesis was generated from its corresponding lead compds. using CATALYST software. Some of the newly synthesized compds. showed interesting cytotoxic activity compared with doxorubicin as a reference drug. These results are nearly consistent with the mol. modeling studies. Moreover, 2 showed significant radioprotective activity.
IT 1035565-78-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(computer-based ligand design and synthesis of some new sulfonamides bearing pyrrole or pyrrolopyrimidine moieties with potential antitumor and radioprotective activities)
RN 1035565-78-9 CAPLUS
CN Benzenesulfonamide, 4-[3,6-dihydro-4-oxo-5-phenyl-7H-pyrrolo[2,3-d]pyrimidin-7-yl]-N-(3-methyl-5-isoxazolyl)- (CA INDEX NAME)

L4 ANSWER 15 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2007:863627 CAPLUS
DOCUMENT NUMBER: 147:235192
TITLE: Preparation of urea derivatives containing nitrogenous aromatic ring compounds as inhibitors of angiogenesis
INVENTOR(S): Funahashi, Yasuhiro; Tsuruoka, Akihiko; Matsukura, Masayuki; Haneda, Toru; Fukuda, Yoshio; Kamata, Junichi; Takahashi, Keiko; Matsushima, Tomohiro; Miyazaki, Kazuki; Nomoto, Ken-Ichi; Watanabe, Tatsuo; Obaishi, Hiroshi; Yamaguchi, Atsumi; Suzuki, Sachi; Nakamura, Katsuji; Mimura, Fusayo; Yamamoto, Yuji; Matsui, Junji; Matsui, Kenji; Yoshiba, Takako; Suzuki, Yasuyuki; Arimoto, Itaru
PATENT ASSIGNEE(S): Eisai Co., Ltd, Japan
SOURCE: U.S., 458pp., Cont.-in-part of Appl. No. PCT/JP01/09221.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 7253286	B2	20070807	US 2003-420466	20030418
US 20040053908	A1	20040318		
WO 2002032872	A1	20020425	WO 2001-JP9221	20011019
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1506962	A2	20050216	EP 2004-25700	20011019
EP 1506962	A3	20050302		
EP 1506962	B1	20080702		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
EP 1777218	A1	20070425	EP 2006-23078	20011019
EP 1777218	B1	20081231		
R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR				
CN 101024627	A	20070829	CN 2007-10007096	20011019
CN 101029022	A	20070905	CN 2007-10007097	20011019
ES 2282299	T3	20071016	ES 2001-976786	20011019
ZA 2003003567	A	20040810	ZA 2003-3567	20030508
JP 2005272474	A	20051006	JP 2005-124034	20050421
JP 4354929	B2	20091028		
US 20060247259	A1	20061102	US 2005-293785	20051202
US 7612092	B2	20091103		

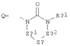
L4 ANSWER 16 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

US 20060160832	A1	20060720	US 2006-347749	20060203
AU 2006203099	A1	20060810	AU 2006-203099	20060719
AU 2006236039	A1	20061207	AU 2006-236039	20061116
AU 2006236039	B2	20080522		
JP 2009215313	A	20090924	JP 2009-123432	20090521

PRIORITY APPLN. INFO.:

JP 2000-320420	A	20001020
JP 2000-386195	A	20001220
JP 2001-46685	A	20010222
WO 2001-JP9221	A2	20011019
AU 2001-295986	A3	20011019
AU 2001-95986	TO	20011019
CN 2001-819710	A3	20011019
EP 2001-976786	A3	20011019
JP 2002-536056	A3	20011019
US 2003-420466	A3	20030418
JP 2005-124034	A3	20050421
US 2005-293785	A1	20051202

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 147:235192
GI

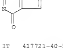


AB N-aryl or N-heteroarylurea derivs. represented by the general formula Ag-Xg-Yg-Tg1 or salts thereof, or hydrates of both [wherein Ag = (un)substituted C6-14 aryl or 5- to 14-membered heterocyclic group; Xg = single bond, O, S, C1-6 alkylene, SO, SO2, (un)substituted NH; Yg = (un)substituted C6-14 aryl, 5- to 14-membered heterocyclic group, C1-8 alkyl, C3-8 alicyclic hydrocarbyl, C6-14 aryl-C1-6 alkyl, 5- to 14-membered heteroaryl-C1-6 alkyl, (CH2)gSO2 (g = 1-8), (CH2)faCH:CH(CH2)fb (fa, fb = 0, 1,2,3), etc.; and Tg1 = a group of the general formula -Eg-CO-NRg1(Zg) or Q; wherein Eg = a single bond,

L4 ANSWER 16 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

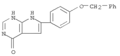
(un)substituted NH; Rg1 = H, (un)substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, C3-8 aliph. hydrocarbyl, etc.; Zg = C1-8 alkyl, C3-8 alicyclic hydrocarbyl, C6-14 aryl, etc.; Zg1, Zg2 = (a) a single bond, (b) C1-6 alkylene optionally having ≥1 atoms selected from O, S, and N in the middle or the terminus of the chain and optionally substituted with oxo, (c) (un)substituted C2-6 alkenyl] are prepd. These compds. are also inhibitors of vascular endothelial growth factor receptor kinase (VEGFR2 kinase) and are useful as antitumor agents against hemangioma, pancreatic cancer, stomach cancer, colon cancer, breast cancer, prostate cancer, lung cancer, brain tumor, leukemia, or ovarian cancer, as cancer metastasis inhibitors, and for the treatment of retina neovascularization, diabetic retinopathy, atherosclerosis, or inflammatory diseases such as osteoarthritis, rheumatoid arthritis, psoriasis, or delayed hypersensitivity. Thus, to soln. of 334 mg 4-[6-(4-benzyloxyphenyl)-7-(2-trimethylsilylethoxymethyl)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-2-chlorophenylamine in 4 mL DMF were added 0.066 mL pyridine and 0.102 mL Ph chlorocarbonate and stirred at room temp. for 2.5 h to give 330 mg N-[4-[6-(4-benzyloxyphenyl)-7-(2-trimethylsilylethoxymethyl)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-2-chlorophenyl]-N'-cyclopropylurea which (260 mg) was hydrogenolyzed over platinum oxide in ethanol overnight to give 160 mg N-[4-[6-(4-hydroxyphenyl)-7-(2-trimethylsilylethoxymethyl)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-2-chlorophenyl]-N'-cyclopropylurea (I). I showed IC50 of 0.02 nM for inhibiting the vascular endothelial growth factor (VEGF)-stimulated sandwich tube formation in vascular endothelial cell.

IT 173458-99-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of urea derivs. containing nitrogenous aromatic ring compds. as angiogenesis inhibitors for prevention or treatment of diseases)
RN 173458-99-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-phenyl- (CA INDEX NAME)

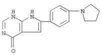


IT 417721-40-5P 417723-61-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of urea derivs. containing nitrogenous aromatic ring compds as angiogenesis inhibitors for prevention or treatment of diseases)
RN 417721-40-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-[4-(phenylmethoxy)phenyl]- (CA INDEX NAME)

L4 ANSWER 16 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 417723-61-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-[4-(1-pyrrolidinyl)phenyl]- (CA INDEX NAME)

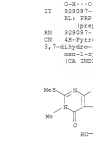


OS.CITING REF COUNT: 28 THERE ARE 28 CAPLUS RECORDS THAT CITE THIS RECORD (39 CITINGS)
REFERENCE COUNT: 117 THERE ARE 117 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2007:450853 CAPLUS
DOCUMENT NUMBER: 147:377588
TITLE: New anti-inflammatory agents
AUTHOR(S): Mohamed, Mosaad S.; Kashad, Ayman E.; Adbel-Monem, Mostafa; Fatahalla, Samar S.
CORPORATE SOURCE: Organic Chemistry Department, Faculty of Pharmacy, Helwan University, Cairo, Egypt
SOURCE: Zeitschrift fuer Naturforschung, C: Journal of Biosciences (2007), 62(1/2), 27-31
CODEN: ZNCSDN; ISSN: 0939-5075
PUBLISHER: Verlag der Zeitschrift fuer Naturforschung
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 147:377588
AB The pyrrole derivs 1a, b and 2a, b were used as precursors for the preparation of N-substituted pyrrole derivs. 3a, b-7a, b and pyrrolo[2,3-d]pyrimidines 13-16. Also, all the newly prepared products were tested for anti-inflammatory activity as analogs to tenoxitos, and some of them revealed moderate anti-inflammatory activity compared to the standard drug indomethacin.
IT 177438-79-2P 888941-70-6P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(N-substituted pyrrole deriv. preparation for use as antiinflammatory agents)
RN 177438-79-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,6-diphenyl-7-(phenylmethyl)- (CA INDEX NAME)

RN 888941-70-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(3,4-dichlorophenyl)-3,7-dihydro-5-phenyl- (CA INDEX NAME)

L4 ANSWER 18 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:307092 CAPLUS
DOCUMENT NUMBER: 146:349080
TITLE: 5-(2-Hydroxy-4,4-dimethyl-6-oxocyclohex-1-enyl)-3-methyl-2-(methylsulfanyl)-6-phenyl-7H-pyrrolo[2,3-d]pyrimidin-4(3H)-one monohydrate: complex sheets generated by multiple hydrogen bonds
AUTHOR(S): Cruz, Silvia; Quiroga, Jairo; de la Torre, Jose M.; Cobo, Justo; Low, John N.; Glidewell, Christopher
CORPORATE SOURCE: Departamento de Quimica, Universidad de Narino, Ciudad Universitaria, Torobaja, Pasto, AA 1175, Colombia
SOURCE: Acta Crystallographica, Section C: Crystal Structure Communications (2004), C60(9), o654-o656
CODEN: ACSCEE; ISSN: 0108-2701
PUBLISHER: Blackwell Publishing Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In 5-(2-hydroxy-4,4-dimethyl-6-oxocyclohex-1-enyl)-3-methyl-2-(methylsulfanyl)-6-phenyl-7H-pyrrolo[2,3-d]pyrimidin-4(3H)-one monohydrate, C22H23N3O3S·H2O, the nonaromic carboxylic ring adopts a half-chair conformation. The mols. are linked into complex sheets by a combination of 1 N-H···O and 3 O-H···O hydrogen bonds. Crystallog. data are given.
IT 923097-70-1
RL: PRP (Properties)
(preparation and crystal and mol. structure of)
RN 923097-70-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5-(2-hydroxy-4,4-dimethyl-6-oxo-1-cyclohexen-1-yl)-3-methyl-2-(methylthio)-6-phenyl-, hydrate (1:1) (CA INDEX NAME)



● H2O

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

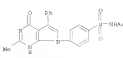
L4 ANSWER 17 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:791813 CAPLUS
DOCUMENT NUMBER: 145:371797
TITLE: Novel antitumor and radioprotective sulfonamides containing pyrrolo[2,3-d]pyrimidines
AUTHOR(S): Ghorab, Mostafa M.; Noamaa, Emam; Ismail, Magda N. F.; Heiba, Helmy I.; Ammar, Yousry A.; Sayed, Marwa Y.
CORPORATE SOURCE: Department of Drug Radiation Research, National Centre for Radiation Research and Technology, Nasr City, Egypt
SOURCE: Arzneimittel Forschung (2004), 54(6), 405-413
CODEN: ARZNAD; ISSN: 0004-4172
PUBLISHER: Editio Cantor Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:371797
AB Several sulfonamides having pyrrole (5a-c, 8, 11a-19, 23, 24), pyrrolo[2,3-d]pyrimidine (6, 7, 10, 20, 21, 25) and pyrrolo[2,3-b]pyridine (22) were synthesized and evaluated for their antitumor and radioprotective activities. The structure of the synthesized compds. was elucidated by elemental analyses and spectral data. Compds. 5a, 16, 17, 19, and 23 displayed more potent antitumor activities than the reference drug, doxorubicin. On the other hand compds. 19, 23 and 25 exhibited radioprotective activities.
IT 906896-17-1P 910622-47-8P
RL: BMA (Drug mechanism of action); BAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of novel antitumor and radioprotective sulfonamides containing pyrrolo[2,3-d]pyrimidines)
RN 906896-17-1 CAPLUS
CN Benzenesulfonamide, 4-[3,4-dihydro-4-oxo-5-phenyl-7H-pyrrolo[2,3-d]pyrimidin-7-yl]- (CA INDEX NAME)

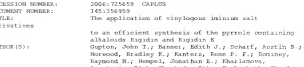
RN 910622-47-8 CAPLUS
CN Acetamide, N-[4-[3,4-dihydro-2-methyl-4-oxo-5-phenyl-7H-pyrrolo[2,3-d]pyrimidin-7-yl]phenylsulfonyl]- (CA INDEX NAME)

L4 ANSWER 19 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 20 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2006:725659 CAPLUS
DOCUMENT NUMBER: 145:354959
TITLE: The application of vinylogous iminium salt derivatives
to an efficient synthesis of the pyrrole containing alkaloids Rigidin and Rigidin E
AUTHOR(S): Gupton, John T.; Banner, Edith J.; Schaff, Austin B.; Norwood, Bradley K.; Kanters, Rene P. F.; Dominy, Raymond N.; Hempel, Jonathan E.; Kharlamova, Anastasia; Bilaha-Chertsel, Ita; Hickenboth, Charles R.; Little, Barrett A.; Sartin, Melissa D.; Coppock, Matthew B.; Krumpe, Keith E.; Burnham, Bruce S.; Holt, Herman; Du, Karen X.; Keertikar, Kartik M.; Diebes, Anthony; Chassemi, Shahnaz; Sikorski, James A.
CORPORATE SOURCE: Department of Chemistry, University of Richmond, Richmond, VA, 23173, USA
SOURCE: Tetrahedron (2006), 62(17), 8243-8255
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:354959
GI



* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

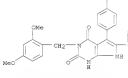
AB Rigidin and rigidin E I (R = H, Me) are prepared in four steps from diphenylpyrroleacrylate II, an intermediate previously used for the synthesis of polycitones. Aminocarbonylation of II with molybdenum hexacarbonyl and either 2,4-dimethoxybenzylamine or methylamine, hydrolysis of the esters, Curtius rearrangement of the free acids with diphenylphosphoryl azide in toluene with concomitant cycloondensation, and O-demethylation with boron tribromide in methylene chloride yields I (R = H, Me). β-(Chloro-formyl)-α,β-unsatd. ester 4-MeOC6H4C(Cl):C(OR)CO2Et (III) is prepared in two steps from Et 4-methoxybenzoylacetate and DMF di-Me acetal; cycloondensation of III with 4-methoxybenzylamine p-toluenesulfonate salt (IV) in DMF yields the (methoxybenzoyl)(methoxybenzyl)pyrrolecarboxylate V (R1 = MeO; R2 = R3 = H) in 45-48% yield, while cycloondensation of III and IV in DMF with sodium hydride provides the regioisomeric pyrrolecarboxylate VI in 86% yield. V (R1 = R2 = R3 = H) (VI1) is prepared in two steps from Et benzoylacetate and phenylglycinamine hydrochloride; methylation of VI1 provides V (R1 = R2 = H, R3 = Me), while nitration of VI1 with nitronium tetrafluoroborate or bromination of VI1 with N-bromosuccinimide provide V (R1 = R3 = H; R2 = NO2, Br).

IT 910239-67-7P 910239-68-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of rigidin and rigidin E in four steps from an intermediate in

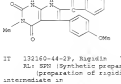
L4 ANSWER 20 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
the synthesis of polycitones)

RN 910239-67-7 CAPLUS
CN 1H-Pyrrole[3,4-d]pyrimidine-2,4(3H,7H)-dione,

3-[(2,4-dimethoxyphenyl)methyl]-6-[4-methoxybenzoyl)-5-(4-methoxyphenyl)- (CA INDEX NAME)

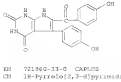


RN 910239-68-8 CAPLUS
CN 1H-Pyrrole[3,4-d]pyrimidine-2,4(3H,7H)-dione,
6-(4-methoxybenzoyl)-5-(4-methoxyphenyl)-3-methyl- (CA INDEX NAME)



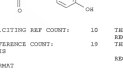
IT 132160-44-2P, Rugvidin 721960-13-0P, Rigidine E
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of rigidin and rigidin E in four steps from an intermediate in
the synthesis of polycitones)

RN 132160-44-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione,
6-(4-hydroxybenzoyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)



RN 721960-13-0 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione,

L4 ANSWER 20 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
6-(4-hydroxybenzoyl)-5-(4-hydroxyphenyl)-3-methyl- (CA INDEX NAME)

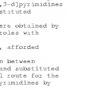


OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

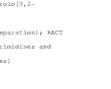
L4 ANSWER 21 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2006:616074 CAPLUS
DOCUMENT NUMBER: 145:271725
TITLE: Synthesis of fused tetrazole[1,5-c]pyrrolo[3,2-e]pyrimidines and their reductive conversion to new 4-aminopyrrolo[2,3-d]pyrimidines
AUTHOR(S): Desai, Nirmal D.
CORPORATE SOURCE: Loyola Centre for Research and Development, St. Xavier's College, Navrangpura, Ahmedabad, India
SOURCE: Synthetic Communications (2006), 36(15), 2169-2182
CODEN: SYNCAV; ISSN: 0039-7911
PUBLISHER: Taylor & Francis, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:271725
AB Some new 7,8-disubstituted 7H-1,2,3,4-tetrazolo[1,5-c]pyrrolo[3,2-e]pyrimidines were synthesized either by diazotization of 4-hydrazino-7,7-disubstituted-7H-pyrrolo[2,3-d]pyrimidines obtained by hydrazinolysis of 4-chloro-7,7-disubstituted 7H-pyrrolo[2,3-d]pyrimidines or via a substitution reaction between 4-chloro-7,7-disubstituted 7H-pyrrolo[2,3-d]pyrimidines and sodium azide. 5,7-Disubstituted-7H-pyrrolo[2,3-d]pyrimidin-4(3H)-ones were obtained by cyclocondensation of 1,4-disubstituted 2-amino-3-cyanopyroles with formic acid, which, on chlorination using phosphorus oxychloride, afforded 4-chloro-5,7-disubstituted 7H-pyrrolo[2,3-d]pyrimidines. 2-Amino-3-cyanopyroles were synthesized from the reaction between 1,2-bromo-1-(4-fluorophenyl) ethylidene) propanedinitrile and substituted aromatic amines under Gewald reaction conditions. A novel route for the synthesis of 4-amino-1,7-disubstituted-7H-pyrrolo[2,3-d]pyrimidines by the reductive ring cleavage of 7H-1,2,3,4-tetrazolo[1,5-c]pyrrolo[3,2-e]pyrimidines was reported.
IT 907585-49-7P 907585-50-0P 907585-51-1P
907585-52-2P 907585-53-3P
RLs ACT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of fused tetrazolo[1,5-c]pyrrolo[3,2-e]pyrimidines and their reductive conversion to 4-aminopyrrolo[2,3-d]pyrimidines)
RN 907585-49-7 CAPLUS
CN 4H-Pyrrolo[3,2-d]pyrimidin-4-one, 5-(4-fluorophenyl)-3,7-dihydro-7-phenyl- (CA INDEX NAME)

L4 ANSWER 21 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 907585-52-2 CAPLUS
CN 4H-Pyrrolo[3,2-d]pyrimidin-4-one, 5,7-bis(4-fluorophenyl)-3,7-dihydro- (CA INDEX NAME)

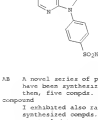


RN 907585-53-8 CAPLUS
CN 4H-Pyrrolo[3,2-d]pyrimidin-4-one, 7-(3-chloro-4-fluorophenyl)-5-(4-fluorophenyl)-3,7-dihydro- (CA INDEX NAME)



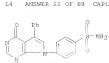
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L4 ANSWER 22 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2006:119289 CAPLUS
DOCUMENT NUMBER: 145:249164
TITLE: Novel synthesis of pyrrolo[2,3-d] pyrimidines bearing sulfonamide moieties as potential antitumor and radioprotective agents
AUTHOR(S): Ismail, Magda M. F.; Ghorab, Mostafa M.; Noaman, Emany
CORPORATE SOURCE: Ammar, Yousry A.; Heiba, Helmy I.; Sayed, Marwa Y. Department of Pharmaceutical Chemistry, Faculty of Pharmacy (Girls), Al-Azhar University, Cairo, Egypt
SOURCE: Arzneimittel Forschung [2006], 56(4), 301-308
CODEN: ARZNAD; ISSN: 0004-4172
PUBLISHER: Editio Cantor Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:249164
GI



AB A novel series of pyrrolo[2,3-d] pyrimidines bearing sulfonamide moieties have been synthesized and tested for their antitumor activity. Among them, five compds. showed promising antitumor activity. Moreover, compound I exhibited also radioprotective activity. The structures of the newly synthesized compds. were established by their elemental analyses and spectral data.
IT 906096-17-1P
RLs PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(preparation and antitumor activity of chloro(pyrrolo)pyrimidine derivative via heterocyclization of cyanoaminoaryl)pyrrole bearing aryl)sulfonamide moiety with formic acid followed by chlorination with POCl3)
RN 906096-17-1 CAPLUS
CN Benzenesulfonamide, 4-(7,8-dihydro-4-oxo-5-phenyl-7H-pyrrolo[2,3-d]pyrimidin-7-yl)- (CA INDEX NAME)

L4 ANSWER 22 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

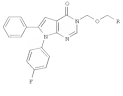


CS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 23 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2006:452247 CAPLUS
DOCUMENT NUMBER: 145:167193
TITLE: Synthesis of non-nucleosides: influence of 7- and 1,3-substituents of new pyrrolo[2,3-d]pyrimidin-4-ones on antiviral activity
AUTHOR(S): Riley, Khalid Mohammed Hassan
CORPORATE SOURCE: Department of Chemistry, Faculty of Science, Minoufiya University, Shebin El-Kom, Egypt
SOURCE: Archiv der Pharmazie (Weinheim, Germany) (2006), 339(4), 174-181
CODEN: ARPMAS; ISSN: 0365-6233
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:167193
GI



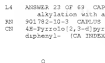
AB A series of substituted diaryl pyrrolo[2,3-d]pyrimidin-4-ones were synthesized, e.g., 1 (R = Me or Ph). 2-Amino-3-pyrrolocarbonitriles were cyclized with formic acid (95%) to afford pyrrolo[2,3-d]pyrimidin-4-ones. Then, the latter compds. were reacted with alkyl halides in the presence of NaH in dry DMF to give the title compds., which were evaluated for activity against herpes simplex virus type-1 (HSV-1).

IT 901782-10-3P 901782-11-4P 901782-12-5P
901782-13-6P 901782-14-7P 901782-15-8P
901782-16-9P 901782-17-0P 901782-18-1P
901782-19-2P 901782-20-5P 901782-21-6P
901782-22-7P 901782-23-8P 901782-24-9P
901782-25-0P 901782-26-1P 901782-27-2P
901782-28-3P 901782-29-4P 901782-30-7P
901782-31-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and antiviral activity of substituted diaryl[pyrrolo]pyrimidinones via heterocyclization of (amino)diaryl(pyrrolo)carbonitriles with formic acid followed by

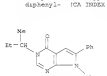
L4 ANSWER 23 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
alkylation with alkyl halides)

RN 901782-10-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3-(1-methylethyl)-6,7-diphenyl- (CA INDEX NAME)

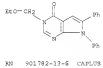
RN 901782-11-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3-(1-methylpropyl)-6,7-diphenyl- (CA INDEX NAME)



RN 901782-12-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3-(ethoxymethyl)-3,7-dihydro-6,7-diphenyl- (CA INDEX NAME)

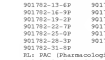


RN 901782-13-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6,7-diphenyl-3-[(phenylmethoxy)methyl]- (CA INDEX NAME)

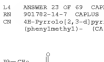


L4 ANSWER 23 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

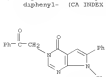
RN 901782-14-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6,7-diphenyl-3-(phenylmethyl)- (CA INDEX NAME)



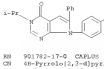
RN 901782-15-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3-(2-oxo-2-phenylethyl)-6,7-diphenyl- (CA INDEX NAME)



RN 901782-16-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-chlorophenyl)-3,7-dihydro-3-(1-methylethyl)-6-phenyl- (CA INDEX NAME)

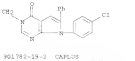


RN 901782-17-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-chlorophenyl)-3,7-dihydro-3-(1-methylpropyl)-6-phenyl- (CA INDEX NAME)

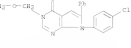


RN 901782-18-1 CAPLUS

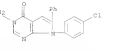
L4 ANSWER 23 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
7-(4-chlorophenyl)-3-(ethoxymethyl)-3,7-
dihydro-6-phenyl- (CA INDEX NAME)



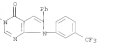
RN 901782-19-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
7-(4-chlorophenyl)-3,7-dihydro-6-phenyl-
3-[(phenylmethoxy)methyl]- (CA INDEX NAME)



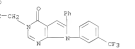
RN 901782-20-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
7-(4-chlorophenyl)-3,7-dihydro-6-phenyl-
3-(phenylmethyl)- (CA INDEX NAME)



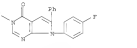
RN 901782-21-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
3,7-dihydro-3-(1-methylethyl)-6-phenyl-7-
[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



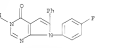
L4 ANSWER 23 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



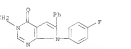
RN 901782-26-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-fluorophenyl)-3,7-dihydro-3-(1-
methylethyl)-6-phenyl- (CA INDEX NAME)



RN 901782-27-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-fluorophenyl)-3,7-dihydro-3-(1-
methylpropyl)-6-phenyl- (CA INDEX NAME)



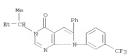
RN 901782-28-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
3-(ethoxymethyl)-7-(4-fluorophenyl)-3,7-
dihydro-6-phenyl- (CA INDEX NAME)



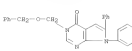
RN 901782-29-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
7-(4-fluorophenyl)-3,7-dihydro-6-phenyl-
3-[(phenylmethoxy)methyl]- (CA INDEX NAME)

L4 ANSWER 23 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

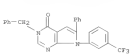
RN 901782-22-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
3,7-dihydro-3-(1-methylpropyl)-6-phenyl-
7-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



RN 901782-23-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-phenyl-3-
[(phenylmethoxy)methyl]-7-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

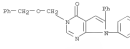


RN 901782-24-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
7,7-dihydro-6-phenyl-3-[(phenylmethyl)-7-
[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

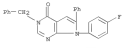


RN 901782-25-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3-(2-oxo-2-phenylethyl)-6-
phenyl-7-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

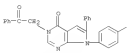
L4 ANSWER 23 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 901782-30-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
7-(4-fluorophenyl)-3,7-dihydro-6-phenyl-
3-(phenylmethyl)- (CA INDEX NAME)



RN 901782-31-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
7-(4-fluorophenyl)-3,7-dihydro-3-(2-oxo-
2-phenylethyl)-6-phenyl- (CA INDEX NAME)



IT 473289-23-5P 473289-24-6P 901782-08-9P
901782-09-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and antiviral activity of substituted
diaryl(pyrrolo)pyrazinones via heterocyclization of
(amino)diaryl(pyrrolo)carbonitriles with formic acid followed by
alkylation with alkyl halides)
RN 473289-23-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6,7-diphenyl- (CA INDEX
NAME)

L4 ANSWER 23 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 477289-04-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-chlorophenyl)-3,7-dihydro-6-phenyl- (CA INDEX NAME)

RN 901782-08-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7,7-dihydro-6-phenyl-7-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 901782-09-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-fluorophenyl)-3,7-dihydro-6-phenyl- (CA INDEX NAME)

L4 ANSWER 24 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2005:1241408 CAPLUS
DOCUMENT NUMBER: 144:128935
TITLE: 3-Arylpiperazinylethyl-1H-pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione derivatives as novel, high-affinity and selective α1-adrenoceptor ligands
AUTHOR(S): Pittala, Valeria; Romeo, Giuseppe; Salerno, Loredana; Siracusa, Maria Angela; Modica, Maria; Materia, Luisa;
Mereghetti, Ilario; Cagnotto, Alfredo; Mennini, Tiziana; Marucci, Gabriella; Angeli, Piero; Russo, Filippo
CORPORATE SOURCE: Dipartimento di Scienze Farmaceutiche, Universita di Catania, Catania, 95125, Italy
SOURCE: Bioorganic & Medicinal Chemistry Letters (2006), 16(1), 150-153
CODEN: BMCLES; ISSN: 0960-894X
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:128935
GI

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AB The discovery of a new series of selective and high-affinity α2-adrenoceptor (α1-AR) ligands, characterized by a 1H-pyrrolo[2,3-d]-pyrimidine-2,4(3H,7H)-dione system, is described. Some synthesized compds., including 2 (R = 2-OMe, 3-Me, 4-Cl), displayed affinity in the nanomolar range for α1-ARs and substantial selectivity with respect to 5-HT1A and dopaminergic D1 and D2 receptors. Functional assays, performed on selected deriva., showed antagonistic properties.
IT 255713-58-8P 873192-85-9P 873192-86-0P
873192-87-1P 873192-88-2P 873192-93-3P
873192-90-6P 873192-91-7P 873192-92-8P
873192-94-0P 873192-95-1P
873192-96-2P 873192-97-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of 3-arylpiperazinylethyl-1H-pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-diones as high-affinity and selective α1-adrenoceptor ligands)
RN 255713-58-8 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-6-phenyl- (CA INDEX NAME)

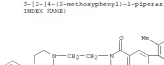
L4 ANSWER 23 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD
(3 CITINGS)
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 24 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 873192-85-9 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-(2-chlorophenyl)-1-piperazinyl]ethyl]-6-phenyl- (CA INDEX NAME)

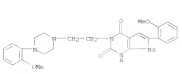
RN 873192-86-0 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-6-(2-methylphenyl)- (CA INDEX NAME)

RN 873192-87-1 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-(2-chlorophenyl)-1-piperazinyl]ethyl]-6-(2-methylphenyl)- (CA INDEX NAME)

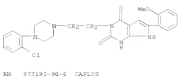


L4 ANSWER 24 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

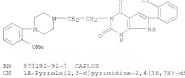
RN 873192-88-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(2-methoxyphenyl)-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]- (CA INDEX NAME)



RN 873192-89-3 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-(2-chlorophenyl)-1-piperazinyl]ethyl]-6-(2-methoxyphenyl)- (CA INDEX NAME)

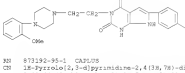


RN 873192-90-6 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(2-chlorophenyl)-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]- (CA INDEX NAME)

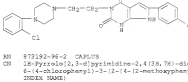


RN 873192-91-7 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(2-chlorophenyl)-3-[2-[4-(2-chlorophenyl)-1-piperazinyl]ethyl]- (CA INDEX NAME)

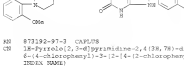
L4 ANSWER 24 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 873192-95-1 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-(2-chlorophenyl)-1-piperazinyl]ethyl]-6-(4-methoxyphenyl)- (CA INDEX NAME)

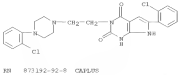


RN 873192-96-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-chlorophenyl)-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]- (CA INDEX NAME)

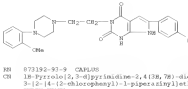


RN 873192-97-3 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-chlorophenyl)-3-[2-[4-(2-chlorophenyl)-1-piperazinyl]ethyl]- (CA INDEX NAME)

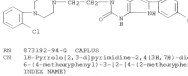
L4 ANSWER 24 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 873192-92-8 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-6-(4-methylphenyl)- (CA INDEX NAME)



RN 873192-93-9 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-(2-chlorophenyl)-1-piperazinyl]ethyl]-6-(4-methylphenyl)- (CA INDEX NAME)



RN 873192-94-0 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-methoxyphenyl)-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]- (CA INDEX NAME)

L4 ANSWER 24 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(3 CITINGS)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 25 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2005:1226426 CAPLUS
DOCUMENT NUMBER: 145:27943
TITLE: Synthesis and antimicrobial screening of some fused heterocyclic pyroles
AUTHOR(S): Mohamed, Mouaad S.; Rashed, Ayman E.; Zaki, Magdy E. A.; Fatahala, Samar S.
CORPORATE SOURCE: Organic Chemistry Department, Faculty of Pharmacy, Helwan University, Cairo, Egypt
SOURCE: Acta Pharmaceutica (Zagreb, Croatia) (2005), 55(3), 237-249
CODEN: APZAEC; ISSN: 1330-0075
PUBLISHER: Croatian Pharmaceutical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:27943
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Pyrrole derivs. were used as precursors for the preparation of pyrrolo[1,7-d]pyrimidine derivs., e.g., I. Also, the formation and structure of different pyrrolotriazolopyrimidine derivs., e.g., II, were discussed. Some of the prepared products showed potent antimicrobial activity.
IT 177418-79-2
RL: PAC (Pharmacological activity); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent)
(preparation, antibacterial and fungicidal activity of 1pyrrolo\pyrimidine derivs. via condensation and heterocyclization of cyano(amino)pyrroles with appropriate reagents)
RN 177418-79-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,6-diphenyl-7-(phenylmethyl)- (CA INDEX NAME)

IT 88894-70-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, antibacterial and fungicidal activity of 1pyrrolo\pyrimidine derivs. via condensation and heterocyclization of cyano(amino)pyrroles

L4 ANSWER 26 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2005:1226542 CAPLUS
DOCUMENT NUMBER: 144:88499
TITLE: Adenosine Kinase Inhibitors. 6. Synthesis, Water Solubility, and Antinociceptive Activity of 5-(Phenyl-7-(5-deoxy-β-D-ribofuranosyl)pyrrolo[2,3-d]pyrimidines Substituted at C4 with Glycinamides and Related Compounds
AUTHOR(S): Bookser, Brett C.; Ugarkar, Bheemarao G.; Matelich, Michael C.; Lenoy, Robert E.; Allan, Matthew Tsuchiya, Meguru; Nakane, Masami; Nagahisa, Atsushi; Wiesner, James B.; Erion, Mark D.
CORPORATE SOURCE: Metabasis Therapeutics, Inc., San Diego, CA, 92121, USA
SOURCE: Journal of Medicinal Chemistry (2005), 48(24), 7808-7820
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:88499
GI

AB 4-(Phenylamino)-5-phenyl-7-(5-deoxy-β-D-ribofuranosyl)pyrrolo[2,3-d]pyrimidine (I) and related compds. known as "diarylribofuranosides" analogs are potent inhibitors of adenosine kinase (AK) and are orally active in animal models of pain such as the rat formalin paw model (EF3269, ED50 = 6.4 mg/kg). However, the utility of this compound class is limited by poor
water solubility that can be attributed to the high energy of crystallization caused by
stacking of the parallel C4 and C5 aryl rings in the solid state I and EF3269 each with p9 7.4 solubility < 0.05 mg/mL. To increase water solubility,
the hydrophobic C4-phenylamino substituent was replaced with a more hydrophilic group, glycinamide. This modification resulted in improved water solubility while retaining AK inhibition potency. Analogs were studied
where changes in the glycinamide moiety were combined with changes to the base and sugar. A lead compound,
4-N-(D-cyclopropylcarbamoylmethyl)amino-5-

L4 ANSWER 25 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
with appropriate reagents)
RN 88894-70-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(3,4-dichlorophenyl)-3,7-dihydro-5-phenyl- (CA INDEX NAME)

OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 26 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
phenyl-7-(5-deoxy-β-D-ribofuranosyl)pyrrolo[2,3-d]pyrimidine (II) (IC50 = 3 nM and water soly. = 32 ± 9 μg/mL at pH 7.4), was further characterized in biol. assays. Compd. II exhibited strong oral efficacy in the rat formalin paw model (ED50 of 2.5 mg/kg). In the most advanced assay, II was found to inhibit bradykinin-induced licking in marmoset monkeys with an ED50 estd. at 0.9 mg/kg without producing evidence of side
effects such as ataxia, sedation, and emesis at this dose. However, lethal toxicity in the rat formalin paw model occurred with high doses of II, and further work on this series was discontinued.
IT 871671-45-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis, water solubility, and antinociceptive activity of 5-phenyl-7-(5-deoxy-β-D-ribofuranosyl)pyrrolo[2,3-d]pyrimidines substituted at C4 with glycinamides as adenosine kinase inhibitors)
RN 871671-45-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5-phenyl- (CA INDEX NAME)

OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)
REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

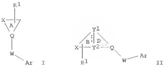
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:1154366 CAPLUS
DOCUMENT NUMBER: 143:422361
TITLE: Preparation of cyclic compounds as CRF receptor antagonists
INVENTOR(S): Gyorkos, Albert Charles; Corrette, Christopher Peter; Cho, Suk Young; Turner, Timothy Mark; Aso, Kazuyoshi; Kori, Masakuni; Gyoten, Michiyo; Condroski, Kevin Ronald; Siedem, Christopher Stephen; Boyd, Steven Armen
PATENT ASSIGNEE(S): Takeda Pharmaceutical Company Limited, Japan; Et Al.; et al.
SOURCE: PCT Int. Appl., 354 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005099688	A2	20051027	WO 2005-US13583	20050406
WO 2005099688	A3	20070531		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, AP, EA, EP, OA				
CA 2562244	A1	20051027	CA 2005-2562244	20050406
EP 1732541	A2	20061220	EP 2005-741906	20050406
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU				
JP 2007532580	T	20071115	JP 2007-507576	20050406
US 20070179165	A1	20070802	US 2007-593891	20070405
PRIORITY APPLN. INFO.:			US 2004-560286P P	20040407
			WO 2005-US13583 W	20050406

OTHER SOURCE(S): CASREACT 143:422361; MARPAT 143:422361
GI

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



AB There are provided corticotropin-releasing factor (CRF) receptor antagonists of formula (I) and (II) [A, B = each independently 5- or 6-membered ring which may be further substituted; D = 5- or 6-membered ring which may be substituted; R1 = (un)substituted alkyl, substituted amino, hydroxy, etc.; X = CO, O, S, etc.; Y1, Y2, Q = independently (un)substituted C or N; W = a bond, (un)substituted methylene, imino, O, S, etc.; Ar = (un)substituted hetero/aryl; addnl. details are given in the claims; with the exception of certain compds.] or salts thereof or prodrugs thereof. For example, 3-(2,4-dimethylphenyl)-6-dipropylamino-5-methyl-2,5-dihydro-4H-pyrazolo[3,4-d]pyrimidin-4-one was prepared by condensation of 6-hydrazino-3-methylpyrimidine-2,4(1H,3H)-dione (preparation given) with PhCHO, cyclization, chlorination, amination of chloride with di-Pr amine and debenzylation. CRF binding inhibitory rates are tabulated for 7 examples of I. I are useful for treating depression and anxiety (no data).

IT 868372-66-1P, 2-[(1-Ethylpropyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868373-48-2P, 2-(Dipropylamino)-5-mesityl-7-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-76-9P, 5-[4-(Benzyloxy)-2-fluorophenyl]-2-(dipropylamino)-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-83-8P, 2-(Dipropylamino)-5-mesityl-7-(4-methoxybenzyl)-3-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-84-9P,

2-(Dipropylamino)-5-(2-fluoro-4-hydroxyphenyl)-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-87-2P, 2-(Dipropylamino)-5-mesityl-3-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one

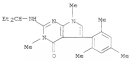
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(drug candidate; preparation of cyclic compds. as CRF receptor antagonists with therapeutic potential)

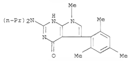
RN 868372-66-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[(1-ethylpropyl)amino]-3,7-dihydro-3,7-

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

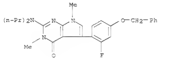
dimethyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



RN 868373-48-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-7-methyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

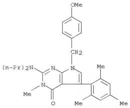


RN 868374-76-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-5-[2-fluoro-4-(phenylmethoxy)phenyl]-3,7-dihydro-3,7-dimethyl- (CA INDEX NAME)

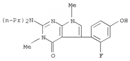


RN 868374-83-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-7-[(4-methoxyphenyl)methyl]-3-methyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

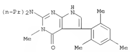
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 868374-84-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-5-(2-fluoro-4-hydroxyphenyl)-3,7-dihydro-3,7-dimethyl- (CA INDEX NAME)



RN 868374-87-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-3-methyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



IT 868372-52-5P, 2-(Dipropylamino)-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-55-8P, 2-(Dimethylamino)-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-56-9P, 2-(Dibutylamino)-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-57-0P, 5-Mesityl-2-[(2-methoxyethyl)amino]-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-58-1P, 2-(Dipropylamino)-3-ethyl-5-mesityl-7-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-60-5P,

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
2-Ethyl-5-mesityl-7-methyl-3-(propylamino)-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 883772-61-9P,
2-(Isopropylamino)-3-isopropyl-5-mesityl-7-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 883772-63-0P,

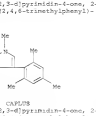
3-Isopropyl-5-mesityl-7-methyl-2-(propylamino)-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 883772-64-1P,
5-Mesityl-7,7-dimethyl-2-(propylamino-1-yl)-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 883772-65-2P,
2-(Isopropylamino)-3,7,7-trimethyl-5-phenyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 883772-68-5P,
2-(Allylamino)-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one monofluoroacetate 883772-70-9P,
5-Mesityl-3,7-dimethyl-2-(pyrrolidin-1-yl)-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 883772-72-9P,
2-[Bis(2-methylpropyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 883772-74-1P,
2-[Bis(2-methylbenzyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 883772-75-2P,
2-[Bis(cyclopropylmethyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 883772-76-3P,
2-[Bis(cyclopropylmethyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 883772-78-5P,
5-Mesityl-7,7-dimethyl-2-(pyrrolidin-1-yl)-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 883772-80-9P,
2-(Diethylamino)-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 883772-82-1P,
2-(Diisopropylamino)-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 883772-84-3P,
2-(Diisopropylamino)-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 883772-86-5P,
2-(Dibenzylamino)-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 883772-88-7P,
2-[Bis(4-methylbenzyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 883772-90-1P,
2-[Bis(2-phenoxyethyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 883772-92-3P,
2-[Bis(2-ethoxyethyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 883772-94-5P,
2-[Bis(pyridin-3-ylmethyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 883772-96-7P,
2-[Bis(4-chlorobenzyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 883772-98-9P,
2-[Bis(pyridin-2-ylmethyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 883773-00-6P,
2-[Bis(4-fluorobenzyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 883773-02-8P,
2-[Bis(2-methoxyethyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 883773-04-0P,
2-[Bis(2-chlorobenzyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 883773-06-2P
883773-08-4P, 2-[Bis(2-naphthylmethyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate
883773-10-8P, 2-[Bis(2-naphthylmethyl)amino]-5-mesityl-3,7-

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
pyrrolo[2,3-d]pyrimidin-4-one 883774-78-7P,

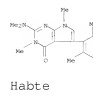
2-(Isopropylamino)-5-[4-ethoxy-2-methylphenyl]-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 883774-79-2P,
2-(Isopropylamino)-3,7-dimethyl-5-(2,4,6-trimethoxyphenyl)-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 883774-80-5P,
5-(2,6-Difluoro-4-methoxyphenyl)-2-(isopropylamino)-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 883774-81-6P,
5-(2,4-Dimethylphenyl)-2-(isopropylamino)-3,7,7-trimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 883774-82-7P,
2-(Isopropylamino)-5-mesityl-3,6,7-trimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 883774-85-0P,

2-(Isopropylamino)-5-[2-fluoro-4-methylphenyl]-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 883774-87-2P,
2-(Isopropylamino)-7-ethyl-5-mesityl-3-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 883774-88-3P,
7-Acetyl-2-(isopropylamino)-5-mesityl-3-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 883774-89-4P,
2-(Isopropylamino)-5-mesityl-3-methyl-7-(2-oxopropyl)-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 883774-90-7P,
2-(Isopropylamino)-5-mesityl-3-methyl-7-(3-oxobutyl)-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preps. of cyclin compds. as CRF receptor antagonists with therapeutic potential)

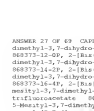
RN 883772-52-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



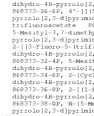
RN 883772-55-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(diethylamino)-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 883772-56-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dibutylamino)-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



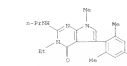
RN 883772-57-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-2-[(2-methoxyethyl)amino]-3,7-dimethyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



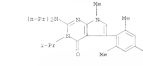
RN 883772-58-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3-ethyl-3,7-dihydro-7-methyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

RN 883772-60-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3-ethyl-3,7-dihydro-7-methyl-2-(propylamino)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

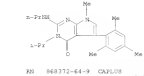
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 868372-61-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-7-methyl-3-[(1-methylethyl)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

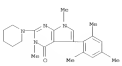


RN 868372-63-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-methyl-3-(1-methylethyl)-2-(propylamino)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

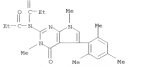


RN 868372-64-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3,7-dimethyl-2-(1-piperidinyl)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



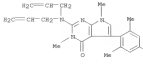
RN 868372-65-0 CAPLUS
CN Propanamide, N-[4,7-dihydro-3,7-dimethyl-4-oxo-5-(2,4,6-trimethylphenyl)-3H-pyrrolo[2,3-d]pyrimidin-2-yl]-N-(1-oxopropyl)- (CA INDEX NAME)



RN 868372-68-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(di-2-propen-1-ylamino)-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868372-67-2
CMF C23 H28 N4 O



CM 2

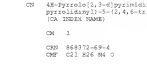
CRN 76-05-1

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CMF C2 H F3 O2

RN 868372-70-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3,7-dimethyl-2-(1-pyrrolidinyl)-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868372-69-4
CMF C21 H26 N4 O



CM 2

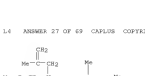
CRN 76-05-1
CMF C2 H F3 O2

RN 868372-72-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis(1-methyl-2-propen-1-yl)amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868372-71-8
CMF C25 H32 N4 O

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868372-74-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis[3-methylbutyl)amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

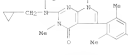
CRN 868372-73-0
CMF C27 H40 N4 O

CM 2

CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

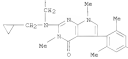
RN 868372-77-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis(cyclopropylmethyl)amino]-7,7-dihydro-7,7-dimethyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



RN 868372-76-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis(cyclopropylmethyl)amino]-7,7-dihydro-7,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868372-75-2
CMF C25 H32 N4 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 868372-74-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis(cyclopropylmethyl)amino]-7,7-dihydro-7,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868372-73-0
CMF C27 H40 N4 O

CM 2

CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 868372-72-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipentylamino)-7,7-dihydro-7,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868372-71-6
CMF C27 H40 N4 O

CM 2

CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 868372-70-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7,7-dihydro-7,7-dimethyl-2-(4-morpholinyl)-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868372-77-4
CMF C21 H26 N4 O2

CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868372-90-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(diethylamino)-7,7-dihydro-7,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868372-79-6
CMF C21 H28 N4 O

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 868372-84-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis[1-methylethyl)amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868372-83-2
CMF C23 H32 N4 O

CM 2

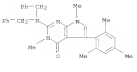
CRN 76-05-1
CMF C2 H F3 O2

RN 868372-85-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis(phenylmethyl)amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868372-85-4
CMF C31 H32 N4 O

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



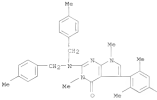
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868372-88-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis[(4-methylphenyl)methyl]amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

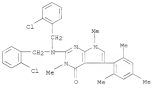
CRN 868372-87-6
CMF C33 H36 N4 O



L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(1:1) (CA INDEX NAME)

CM 1

CRN 868372-91-2
CMF C31 H30 Cl2 N4 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868372-94-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis(3-pyridinylmethyl)amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868372-93-4
CMF C29 H30 N6 O

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868372-90-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis[2-phenoxyethyl]amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868372-89-8
CMF C33 H36 N4 O3

CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868372-92-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis[(2-chlorophenyl)methyl]amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868372-96-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis[(4-chlorophenyl)methyl]amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868372-95-6
CMF C31 H30 Cl2 N4 O

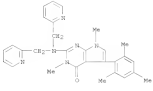
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868372-98-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis(2-pyridinylmethyl)amino]-3,7-dihydro-1,7-dimethyl-5-[2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868372-97-8
CMF C29 H32 N6 O

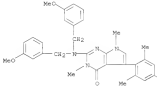


CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-00-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis[(4-

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



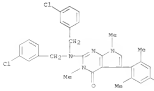
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-04-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
2-[bis[(3-chlorophenyl)methyl]amino]-3,7-dihydro-3,7-dimethyl-5-[2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868373-03-9
CMF C31 H30 Cl2 N4 O

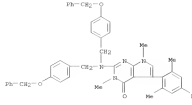


CM 2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
[phenylmethoxyphenyl)methyl]amino]-3,7-dihydro-3,7-dimethyl-5-[2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868372-99-0
CMF C45 H44 N4 O3



CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-02-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis[(3-methoxyphenyl)methyl]amino]-3,7-dihydro-3,7-dimethyl-5-[2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

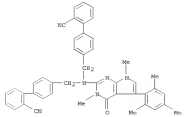
CRN 868373-01-7
CMF C33 H36 N4 O3

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CRN 76-05-1
CMF C2 H F3 O2

RN 868373-06-2 CAPLUS
CN [1,1'-Biphenyl]-2-carbonitrile, 4'-[[[(2'-cyano[1,1'-biphenyl]-4-yl)methyl][4,7-dihydro-3,7-dimethyl-4-oxo-5-[2,4,6-trimethylphenyl)-3H-pyrrolo[2,3-d]pyrimidin-2-yl]amino]methyl]-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868373-05-1
CMF C45 H38 N6 O



CM 2

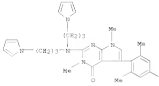
CRN 76-05-1
CMF C2 H F3 O2

RN 868373-08-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis[3-(1H-pyrrol-1-yl)propyl]amino]-

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
2,7-dihydro-3,7-dimethyl-5-[2,4,6-trimethylphenyl]-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-67-3
CMF C51 H58 N6 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-10-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis(2-naphthalenylmethyl)amino]-3,7-dihydro-3,7-dimethyl-5-[2,4,6-trimethylphenyl]-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868373-09-5
CMF C39 H36 N4 O

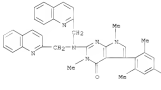
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-14-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis(2-quinolinylmethyl)amino]-3,7-dihydro-3,7-dimethyl-5-[2,4,6-trimethylphenyl]-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-13-1
CMF C37 H34 N6 O



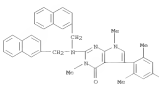
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-16-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis[[3-fluoro-5-(trifluoromethyl)phenyl]methyl]amino]-3,7-dihydro-3,7-dimethyl-5-[2,4,6-trimethylphenyl]-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 3

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



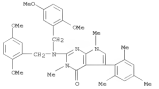
CM 2

CRN 76-05-1
CMF C2 H F3 O2

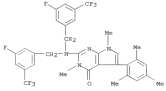
RN 868373-12-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis[[2,5-dimethoxyphenyl]methyl]amino]-3,7-dihydro-3,7-dimethyl-5-[2,4,6-trimethylphenyl]-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-11-9
CMF C35 H40 N4 O5



L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CRN 868373-15-3
CMF C33 H28 F6 N4 O



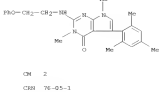
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868372-18-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3,7-dimethyl-2-[(2-phenoxyethyl)amino]-5-[2,4,6-trimethylphenyl]-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-17-5
CMF C25 H28 N4 O2



CM 2

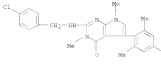
CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 868373-29-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[[(4-chlorophenyl)methyl]amino]-7,7-dihydro-7,7-dimethyl-5-[2,4,6-trimethylphenyl]-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868373-19-7
CMF C24 H25 Cl N4 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-22-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[[1,1-dimethyl-2-oxo-2-phenylethyl]amino]-7,7-dihydro-7,7-dimethyl-5-[2,4,6-trimethylphenyl]-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

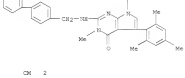
CRN 868373-23-3
CMF C27 H30 N4 O2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 868373-26-6 CAPLUS
CN [1,1'-Biphenyl]-2-carbonitrile, 4'-[[4,7-dihydro-7,7-dimethyl-4-oxo-5-[2,4,6-trimethylphenyl]-3H-pyrrolo[2,3-d]pyrimidin-2-yl]amino]methyl]-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-25-5
CMF C31 H29 N5 O



CM 2

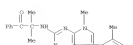
CRN 76-05-1
CMF C2 H F3 O2

RN 868373-28-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5,7-dihydro-2,7-dimethyl-2-[(2-naphthalenylmethyl)amino]-5-[2,4,6-trimethylphenyl]-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868372-27-7
CMF C28 H28 N4 O

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



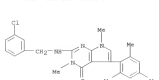
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-24-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[[(3-chlorophenyl)methyl]amino]-7,7-dihydro-7,7-dimethyl-5-[2,4,6-trimethylphenyl]-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

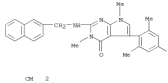
CRN 868373-23-3
CMF C24 H25 Cl N4 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



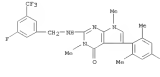
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-30-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[[(3-fluoro-5-(trifluoromethyl)phenyl]methyl]amino]-7,7-dihydro-7,7-dimethyl-5-[2,4,6-trimethylphenyl]-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-29-9
CMF C25 H24 F4 N4 O



CM 2

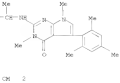
CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 868373-32-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7,7-dimethyl-2-[(1-methylbutyl)amino]-5-[2,4,6-trimethylphenyl]-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868373-31-3
CMF C22 H30 N4 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-34-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(cyclopentylamino)-3,7-dihydro-3,7-dimethyl-5-[2,4,6-trimethylphenyl]-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

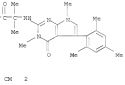
CRN 868373-33-5
CMF C22 H28 N4 O

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 868373-38-0 CAPLUS
CN Alanine, N-[4,7-dihydro-3,7-dimethyl-4-oxo-5-(2,4,6-trimethylphenyl)-3H-pyrrolo[2,3-d]pyrimidin-2-yl]-2-methyl-, ethyl ester, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 868373-37-9
CMF C23 H30 N4 O3



CM 2

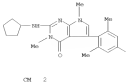
CRN 76-05-1
CMF C2 H F3 O2

RN 868373-40-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3,7-dimethyl-2-[(1-propylbutyl)amino]-5-[2,4,6-trimethylphenyl]-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868373-39-1
CMF C24 H34 N4 O

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



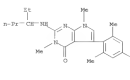
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-36-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[(1-ethylbutyl)amino]-3,7-dihydro-3,7-dimethyl-5-[2,4,6-trimethylphenyl]-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

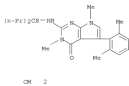
CRN 868373-35-7
CMF C23 H32 N4 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



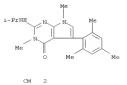
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-42-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3,7-dimethyl-2-[(1-methylethyl)amino]-5-[2,4,6-trimethylphenyl]-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 868373-41-5
CMF C20 H26 N4 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 868373-44-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(ethylamino)-3,7-dihydro-7,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

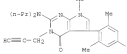
CRN 868373-43-7
CMF C19 H24 N4 O

CM 2

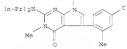
CRN 76-05-1
CMF C2 H F3 O2

RN 868373-45-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[[1-ethylpropyl)methylamino]-3,7-dihydro-7,7-dimethyl-5-(2,4,6-trimethylphenyl)-, hydrochloride (1:1) (CA INDEX NAME)

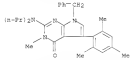
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



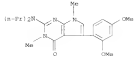
RN 868374-66-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(4-chloro-2-methylphenyl)-2-(dipropylamino)-3,7-dihydro-7,7-dimethyl- (CA INDEX NAME)



RN 868374-72-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-1-methyl-7-(phenylmethyl)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

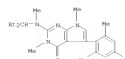


RN 868374-74-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(2,6-dimethoxyphenyl)-2-(dipropylamino)-3,7-dihydro-3,7-dimethyl- (CA INDEX NAME)



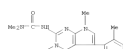
RN 868374-75-8 CAPLUS

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

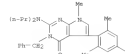


● x HCl

RN 868373-46-0 CAPLUS
CN Urea, N'-[4,7-dihydro-3,7-dimethyl-4-oxo-5-(2,4,6-trimethylphenyl)-7H-pyrrolo[2,3-d]pyrimidin-2-yl]-N,N-dimethyl- (CA INDEX NAME)



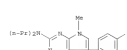
RN 868373-50-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-7-methyl-3-(phenylmethyl)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



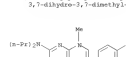
RN 868373-51-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-7-methyl-3-(2-propyn-1-yl)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

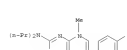
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-[2,4-bis(trifluoromethyl)phenyl]-2-(dipropylamino)-3,7-dihydro-3,7-dimethyl- (CA INDEX NAME)



RN 868374-77-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(2,4-dimethylphenyl)-2-(dipropylamino)-3,7-dihydro-3,7-dimethyl- (CA INDEX NAME)

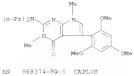


RN 868374-78-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-5-(4-ethoxy-2-methylphenyl)-3,7-dihydro-3,7-dimethyl- (CA INDEX NAME)

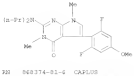


RN 868374-79-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethoxyphenyl)- (CA INDEX NAME)

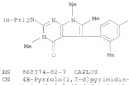
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 868374-89-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(2,6-difluoro-4-methoxyphenyl)-2-(dipropylamino)-7,7-dihydro-3,7-dimethyl- (CA INDEX NAME)

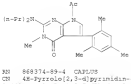


RN 868374-91-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-[2,4-dimethylphenyl]-2-(dipropylamino)-7,7-dihydro-3,6,7-trimethyl- (CA INDEX NAME)

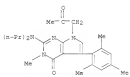


RN 868374-92-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-3,6,7-trimethyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

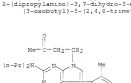
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 868374-89-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-3-methyl-7-(2-oxopropyl)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

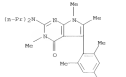


RN 868374-90-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-3-methyl-7-(2-oxobutyl)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

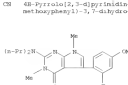


IT 868372-53-6P, 2-Amino-3-mesityl-7-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-54-7P, 2-Amino-7-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-59-2P, 2-Amino-3-ethyl-5-mesityl-7-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-62-7P, 2-Amino-7-isopropyl-5-mesityl-7-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of cyclic compds. as CRF receptor antagonists)

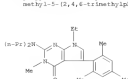
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 868374-85-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-5-(2-fluoro-4-methoxyphenyl)-3,7-dihydro-3,7-dimethyl- (CA INDEX NAME)



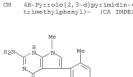
RN 868374-86-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-7-ethyl-3,7-dihydro-3-methyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



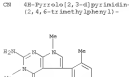
RN 868374-88-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-acetyl-2-(dipropylamino)-3,7-dihydro-3-methyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
with therapeutic potential)

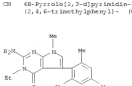
RN 868372-53-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-3,7-dihydro-7-methyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



RN 868372-54-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

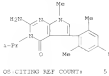


RN 868372-59-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-3-ethyl-3,7-dihydro-7-methyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



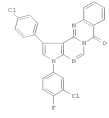
RN 868372-62-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-3,7-dihydro-7-methyl-3-(1-methylethyl)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



05 CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

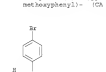
L4 ANSWER 28 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2005:952284 CAPLUS
DOCUMENT NUMBER: 145:27938
TITLE: Synthesis of 1,3-disubstituted-5a-hydropyrrolo[2,3-d]quinazoline[3,2-e]pyrimidin-6(5H)-ones: A comparison of conventional and microwave technique
AUTHOR(S): Augustine, Cicily; Agrawal, Y. K.
CORPORATE SOURCE: Institute of Pharmacy & Sciences, Nirma University of Science and Technology, Ahmedabad, 382 481, India
SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (2005), 44B(9), 1853-1858
CODEN: IJSBDB; ISSN: 0376-4699
PUBLISHER: National Institute of Science Communication and Information Resources
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:27938
GI



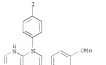
AB An exclusive new ring system in 1,3-disubstituted-5a-hydropyrrolo[2,3-d]quinazoline[3,2-e]pyrimidin-6(5H)-ones (e. g. I) has been synthesized from 4-chloropyrrolo[2,3-d]pyrimidines which were prepared using phase transfer catalysts. The synthesis the final pyrimidinones includes a comparative study of the conventional and microwave techniques.
IT 220835-19-8 220835-20-1 220835-21-2
243665-93-2 243665-94-3 243665-95-4
243665-96-5 287177-12-2 889670-19-3
889670-20-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of disubstituted-hydropyrroloquinazolinopyrimidinones via phase transfer-catalyzed chlorination of pyrrolopyrimidinones followed by cyclocondensation with anthranilic acid or ester using conventional or

L4 ANSWER 28 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
microwave heating)
RN 220835-19-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(4-iodophenyl)-5-phenyl- (CA INDEX NAME)

RN 220835-20-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-bromophenyl)-3,7-dihydro-5-(4-methoxyphenyl)- (CA INDEX NAME)

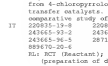


RN 220835-21-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(4-iodophenyl)-5-(4-methoxyphenyl)- (CA INDEX NAME)

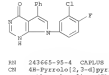


RN 243665-93-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-fluorophenyl)-3,7-dihydro-5-phenyl- (CA INDEX NAME)

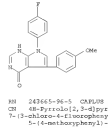
L4 ANSWER 28 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 243665-94-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(3-chloro-4-fluorophenyl)-3,7-dihydro-5-phenyl- (CA INDEX NAME)

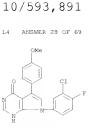


RN 243665-95-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-fluorophenyl)-3,7-dihydro-5-(4-methoxyphenyl)- (CA INDEX NAME)

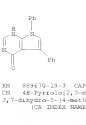


RN 243665-96-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(3-chloro-4-fluorophenyl)-3,7-dihydro-5-(4-methoxyphenyl)- (CA INDEX NAME)

L4 ANSWER 29 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 287177-12-2 CAPLUS
CN 4H-Pyrrolo[3,4-d]pyrimidin-4-one, 3,7-dihydro-5,7-diphenyl- (CA INDEX NAME)



RN 88967G-19-3 CAPLUS
CN 4H-Pyrrolo[3,4-d]pyrimidin-4-one, 3,7-dihydro-5-(4-methoxyphenyl)-7-phenyl- (CA INDEX NAME)

RN 88967G-29-6 CAPLUS
CN 4H-Pyrrolo[3,4-d]pyrimidin-4-one, 3,7-dihydro-5,7-bis(4-methoxyphenyl)- (CA INDEX NAME)

L4 ANSWER 29 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2005:613375 CAPLUS
DOCUMENT NUMBER: 143:133384
TITLE: Preparation of pyrrolopyrimidine derivatives and analogs and their use as inhibitors of epidermal growth factor receptor (EGFR)
INVENTOR(S): Grotzfeld, Robert M.; Patel, Hitesh K.; Mehta, Shamal A.; Milanov, Zdravko V.; Lai, Andilly G.; Lockhart, David J.
PATENT ASSIGNEE(S): Abbott Biosciences Corp., USA
SOURCE: U.S. Pat. Appl. Publ., 80 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050153999	A1	20050714	US 2005-36241	20050113
US 20050165019	A1	20050728	US 2005-35949	20050113
WO 2005067546	A2	20050728	WO 2005-US1399	20050113
WO 2005067546	A3	20061207		

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US 20050187289 A1 20050825 US 2005-35939 20050113
US 20050229806 A1 20051027 US 2005-35619 20050113
PRIORITY APPLN. INFO.: US 2004-536301P P 20040113
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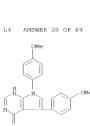
L4 ANSWER 28 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 29 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): CASREACT 143:133384; MARPAT 143:133384
GI

AB Aminopyrrolopyrimidine derivs. [I]or pharmaceutically acceptable salts, N-oxides, prodrugs, or solvates thereof or pharmaceutically active metabolites [X1, X2 = N, O, S, (un)substituted NR, CR< [where R6 = R, (un)substituted heteroaryl or Ph); R1 = -(CHR1a)z-R1b (where R1a = H, C1-4 alkyl, F, Cl-4 fluoroalkyl, Cl-4 alkoxy, CO2R, CONR2, etc.; z = 0-3; R1b = (un)substituted Ph); R2 = H, (un)substituted alkyl; or R2 and R1 taken together form a substituted fully unsatd. monocyclic heterocycle; R3 = H, L3-(CHR3a)a-R3b (where L3 = a bond, NR, O, S; R3a = H, C1-4 alkyl, F, Cl-4 fluoroalkyl, Cl-4 alkoxy, mono - or di(C1-4 alkyl)amine; a = 0-3; R3b = H, (un)substituted Ph); R5 = H, (un)substituted Ph; or R6 and R5 taken together form an (un)substituted aromatic carbocycle or heterocycle; or when X1 = CR6 and X2 = (un)substituted NR, R6 and R1 taken together form an (un)substituted 5- or 6-membered aromatic heterocycle] are prepared These compds. modulate kinase activity, in particular epidermal growth factor receptor (EGFR) protein tyrosine kinases, and are useful in the treatment and prevention of a variety of diseases and unwanted conditions mediated by EGFR which include blood vessel growth, cancer, benign hyperplasia, keloid formation, and psoriasis. Thus, 1,5-dihydro-4H-pyrimido[5,4-b]indol-4-one was chlorinated by POCl3 at 100° for 4 h to give 4-chloro-5H-pyrimido[5,4-b]indole which was heated with 3-chloroaniline in n-propanol at 80° for 3 h to give 4-(3-chlorophenylamino)-5H-pyrimido[5,4-b]indole (II) II showed the binding affinity to wild type-EGFY with Kd of <100 nM.

IT 173458-97-4 1057142-92-3
RL: PRPH (Prophetic)
(Preparation of pyrrolopyrimidine derivatives and analogs and their use as inhibitors of epidermal growth factor receptor (EGFR))

RN 173458-97-4 CAPLUS
CN 6H-Purino[2,3-d]pyrimidin-6-one, 7,7-dihydro-4-(4-methoxyphenyl)- (CA INDEX NAME)

L4 ANSWER 29 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 1057142-92-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 6-(4-bromophenyl)-3,7-dihydro- (CA INDEX NAME)

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

L4 ANSWER 30 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:1060779 CAPLUS
DOCUMENT NUMBER: 142:38274
TITLE: Preparation of 7H-pyrrolo[2,3-d]pyrimidines as protein tyrosine kinase inhibitors
INVENTOR(S): Bold, Guido; Caravatti, Hans-Georg; Caravatti, Giorgio; Traxler, Peter
PATENT ASSIGNEE(S): Novartis AG, Switz.
SOURCE: U.S. Pat. Appl. Publ., 41 pp., Cont.-in-part of U.S. Ser. No. 485,747.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040248911	A1	20041209	US 2004-783099	20040220
US 7323469	B2	20080129		
WO 2003013541	A1	20030220	WO 2002-EP8700	20020806
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR				
CN 101560214	A	20091021	CN 2009-10137877	20020806
US 20040242600	A1	20041202	US 2004-485747	20040203
US 7244729	B2	20070717		
PRIORITY APPLN. INFO.:			GB 2001-19249	A 20010807
			WO 2002-EP8700	W 20020806
			US 2004-485747	A2 20040203
			CN 2002-815351	A3 20020806

OTHER SOURCE(S): MARPAT 142:38274
GI

L4 ANSWER 39 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

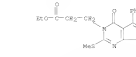
AB Title compds. [I; X1, R2 = H, (substituted) alkyl, cycloalkyl, heterocyclyl, RATICAL; R4 = (substituted) amino, heterocyclyl; Y = null, alkyl; Z = O, S, imino; R1NIR = heterocyclyl; R3 = heterocyclyl, (substituted) aryl; Q = alkylene, CO, alkylenecarbonyl; Q - NR, CO; X = null, alkylene; with provisos], were prepared Thus, [5-chloro-4-[1-isopropyl-1-(4-(4-ethylpiperazin-1-ylmethyl)phenyl)-7H-pyrrolo[2,3-d]pyrimidin-4-yl]amine (preparation outlined) inhibited the tyrosine kinase activity of HER-1, HER-2, and KDR with IC50 = 0.0021 mM, 0.008 mM, and 0.0107 mM, resp.
IT 497843-34-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of pyrrolopyrimidines as protein tyrosine kinase inhibitors)
RN 497843-34-8 CAPLUS
CN Benzonitrile, 4-(4,7-dihydro-4-oxo-3H-pyrrolo[2,3-d]pyrimidin-6-yl)- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITING)
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

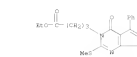
L4 ANSWER 31 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:459007 CAPLUS
DOCUMENT NUMBER: 141:64410
TITLE: Docking of indolo- and pyrrolo-pyrimidines to DNA. New DNA-intercalative polycycles from amino-indoles/pyrroles and BMHA
AUTHOR(S): Lauria, Antonino; Diana, Patrizia; Barraja, Paola; Montalbano, Alessandra; Dattolo, Gaetano; Cirrincione, Girolamo; Almerico, Anna Maria
CORPORATE SOURCE: Dip. Farmacochim., Tossicologico Biol., Univ. degli Studi di Palermo, Palermo, 90123, Italy
SOURCE: ARKIVOC (Gainesville, FL, United States) (2004), (5), 263-271
CODEN: AGFURA
URL: http://www.arkat-usa.org/ark/journal/2004/Tortorella/VT-1079L/1079L.pdf
PUBLISHER: Arkat USA Inc.
DOCUMENT TYPE: Journal; (online computer file)
LANGUAGE: English
AB New indolo- and pyrrolo-pyrimidines of type 1-4 were studied for their ability to form stable complexes with DNA fragments. The calculated free energies of binding were found in the range -8.79 - -16.72 Kcal/mol. The docking studies revealed a common binding mode with the chromophore intercalated between GC base pairs whereas the side chain lies along the minor groove.
IT 712312-77-1 712312-78-2 712312-79-3
712312-80-6 712312-81-7 712312-82-8
712312-83-9 712312-84-0 712312-85-1
712312-86-2 712312-87-3 712312-88-4
712312-89-5 712312-90-8 712312-91-9
712312-92-0 712312-93-1 712312-94-2
RL: PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study)
(docking of indolo- and pyrrolo-pyrimidines to DNA.)
RN 712312-77-1 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-acetic acid, 4,7-dihydro-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester (CA INDEX NAME)

RN 712312-78-2 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-propanoic acid, 4,7-dihydro-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester (CA INDEX NAME)

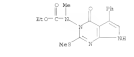
L4 ANSWER 31 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



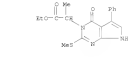
RN 712712-79-7 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-butanoic acid, 4,7-dihydro-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester (CA INDEX NAME)



RN 712712-80-0 CAPLUS
CN Carbamic acid, [4,7-dihydro-2-(methylthio)-4-oxo-5-phenyl-3H-pyrrolo[2,3-d]pyrimidin-7-yl]methyl-, ethyl ester (9CI) (CA INDEX NAME)

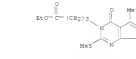


RN 712712-81-1 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-acetic acid, 4,7-dihydro-α-methyl-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester (CA INDEX NAME)

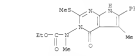


RN 712712-82-2 CAPLUS

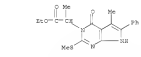
L4 ANSWER 31 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



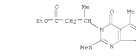
RN 712312-86-2 CAPLUS
CN Carbamic acid, [4,7-dihydro-5-methyl-2-(methylthio)-4-oxo-6-phenyl-3H-pyrrolo[2,3-d]pyrimidin-3-yl]methyl-, ethyl ester (9CI) (CA INDEX NAME)



RN 712312-87-3 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-acetic acid, 4,7-dihydro-α,5-dimethyl-2-(methylthio)-4-oxo-6-phenyl-, ethyl ester (CA INDEX NAME)

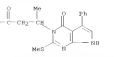


RN 712312-88-4 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-propanoic acid, 4,7-dihydro-β,5-dimethyl-2-(methylthio)-4-oxo-6-phenyl-, ethyl ester (CA INDEX NAME)

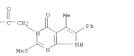


RN 712312-89-5 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-acetic acid, 4,7-dihydro-6-methyl-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester (CA INDEX NAME)

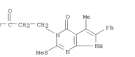
L4 ANSWER 31 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-propanoic acid, 4,7-dihydro-β-methyl-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester (CA INDEX NAME)



RN 712312-83-9 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-acetic acid, 4,7-dihydro-5-methyl-2-(methylthio)-4-oxo-6-phenyl-, ethyl ester (CA INDEX NAME)

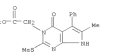


RN 712312-84-0 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-propanoic acid, 4,7-dihydro-5-methyl-2-(methylthio)-4-oxo-6-phenyl-, ethyl ester (CA INDEX NAME)

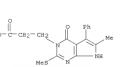


RN 712312-85-1 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-butanoic acid, 4,7-dihydro-5-methyl-2-(methylthio)-4-oxo-6-phenyl-, ethyl ester (CA INDEX NAME)

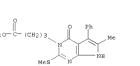
L4 ANSWER 31 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



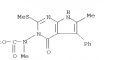
RN 712312-90-8 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-propanoic acid, 4,7-dihydro-6-methyl-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester (CA INDEX NAME)



RN 712312-91-9 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-butanoic acid, 4,7-dihydro-6-methyl-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester (CA INDEX NAME)

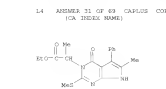


RN 712312-92-0 CAPLUS
CN Carbamic acid, [4,7-dihydro-6-methyl-2-(methylthio)-4-oxo-5-phenyl-3H-pyrrolo[2,3-d]pyrimidin-3-yl]methyl-, ethyl ester (9CI) (CA INDEX NAME)

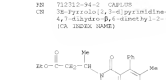


RN 712312-93-1 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-acetic acid, 4,7-dihydro-α,6-dimethyl-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester

L4 ANSWER 31 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(CA INDEX NAME)

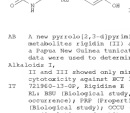


RN 712312-94-2 CAPLUS
CN 3H-Pyrrolo[3,4-d]pyrimidine-3-propanoic acid, 4,7-dihydro-β,4-dimethyl-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester (CA INDEX NAME)



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

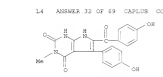
L4 ANSWER 32 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:173215 CAPLUS
DOCUMENT NUMBER: 141:120450
TITLE: Rigidin E, a new pyrrolopyrimidine alkaloid from a Papua New Guinea tunicate Eudistoma species
AUTHOR(S): Davis, Rohan A.; Christensen, Lane V.; Richardson, Adam D.; Moreira da Rocha, Renata; Ireland, Chris M.
CORPORATE SOURCE: Department of Medicinal Chemistry, University of Utah, Salt Lake City, UT, 84112, USA
SOURCE: Marine Drugs (2003), 1(1), 27-33
CODEN: MDARXE; ISSN: 1660-3397
URL: http://www.mdpi.net/marinedrugs/papers/paper03/m
dl01027.pdf
PUBLISHER: MDPI Center
DOCUMENT TYPE: Journal; (online computer file)
LANGUAGE: English
GI



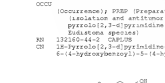
I

AB A new pyrrolo[2,3-d]pyrimidine alkaloid, rigidin E (I), and the known metabolites rigidin (II) and 1-methylherbipoline (III) were isolated from a Papua New Guinea tunicate Eudistoma sp. A combination of spectroscopic data were used to determine the structures of these metabolites. Alkaloids I, II and III showed only minimal cell growth inhibition when assayed for cytotoxicity against MCF 7&S and A431 cancer cell lines.
IT 721960-13-0P, Rigidine E
RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PREP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(isolation and antitumor activity of rigidin E, a new pyrrolo[2,3-d]pyrimidine alkaloid from a Papua New Guinea tunicate Eudistoma species)
RN 721960-13-0 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxybenzyl)-5-(4-hydroxyphenyl)-3-methyl- (CA INDEX NAME)

L4 ANSWER 32 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



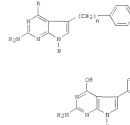
IT 132160-44-2P, Rigidin
RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(isolation and antitumor activity of rigidin E, a new pyrrolo[2,3-d]pyrimidine alkaloid from a Papua New Guinea tunicate Eudistoma species)
RN 132160-44-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxybenzyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD
(9 CITINGS)
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L4 ANSWER 33 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:91940 CAPLUS
DOCUMENT NUMBER: 140:59601
TITLE: A New and Efficient Synthesis of Pyrrolo[2,3-d]pyrimidine Anticancer Agents: Alimta (LY231514, MTA), Nome-Alimta, TNP-351, and Some Aryl-5-Substituted Pyrrolo[2,3-d]pyrimidines
AUTHOR(S): Taylor, Edward C.; Liu, Bin
CORPORATE SOURCE: Department of Chemistry, Princeton University, Princeton, NJ, 08544, USA
SOURCE: Journal of Organic Chemistry (2003), 68(26), 9938-9947
CODEN: JOCEAH; JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:59601
GI

I



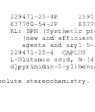
II

AB Alimta (I; R = OH, n = 2), as well as homo-Alimta (I; R = OH, n = 3), a non-bridged analog of Alimta I (R = OH, n = 0), and TNP-351 (I; R = NH2, n = 3) have been prepared by a new method that involves Michael addition of the appropriate 1-nitroalkene with 2,6-diamino-3H-pyrimidin-4-one or 2,4,6-triaminopyrimidine, followed by a Mef reaction of the resulting primary nitro Michael adduct. Spontaneous intramol. cyclization of the resulting aldehyde with the pyrimidine 6-amino group yields the corresponding pyrrolo[2,3-d]pyrimidine. A series of previously unknown 5-arylpyrrolo[2,3-d]pyrimidines, e.g. II, was prepared by the same methodol. from the above pyrimidines and nitrostyrenes. It has been found that the intermediate primary nitro Michael adduct can be prepared in a single step by sonication of a mixture of an arylaldehyde, nitromethane, and the 6-aminopyrimidine in acetic acid containing ammonium acetate.
IT 637780-42-8P 637780-43-9P

L4 ANSWER 33 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(new and efficient synthesis of pyrrolo[2,3-d]pyrimidine anticancer agents and acyl 5-substituted pyrrolo[2,3-d]pyrimidines)
RN 637780-42-8 CAPLUS
CN Benzoic acid, 4-[2-amino-4,7-dihydro-4-oxo-3H-pyrrolo[2,3-d]pyrimidin-5-yl]- (CA INDEX NAME)

RN 637780-43-9 CAPLUS
CN L-Glutamic acid, N-[4-[2-amino-4,7-dihydro-4-oxo-1H-pyrrolo[2,3-d]pyrimidin-5-yl]benzoyl]-, diethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 229471-25-4P 259145-28-3P 637780-52-0P
637780-54-2P 637780-56-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(new and efficient synthesis of pyrrolo[2,3-d]pyrimidine anticancer agents and acyl 5-substituted pyrrolo[2,3-d]pyrimidines)
RN 229471-25-4 CAPLUS
CN L-Glutamic acid, N-[4-[2-amino-4,7-dihydro-4-oxo-1H-pyrrolo[2,3-d]pyrimidin-5-yl]benzoyl]- (9CI) (CA INDEX NAME)

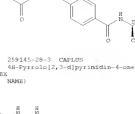
Absolute stereochemistry.

L4 ANSWER 33 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 637780-56-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-5-(4-chlorophenyl)-3,7-dihydro- (CA INDEX NAME)

08.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)
REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 33 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 259145-28-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-5,7-dihydro-5-phenyl- (CA INDEX NAME)

RN 637780-52-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-5-(2-chlorophenyl)-3,7-dihydro- (CA INDEX NAME)

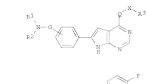
RN 637780-54-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-5-(3-chlorophenyl)-3,7-dihydro- (CA INDEX NAME)

L4 ANSWER 34 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:173054 CAPLUS
DOCUMENT NUMBER: 138:170253
TITLE: Preparation of 4-amino-6-phenyl-pyrrolo[2,3-d]pyrimidines as protein tyrosine kinase inhibitors
INVENTOR(S): Bold, Guido; Caprara, Hans-Georg; Caravatti, Giorgio; Traxler, Peter
PATENT ASSIGNEE(S): Novartis AG, Swtz.; Novartis Pharma G.m.b.H.
SOURCE: PCT Int. Appl., 95 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

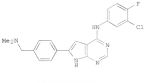
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003013541	A1	20030220	WO 2002-EP8780	20020806
W: AE, AG, AL, AM, AT, AU, AZ, BA, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MK, MN, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR
CA 2453881	A1	20030220	CA 2002-2453881	20020806
AU 2002324029	A1	20030224	AU 2002-324029	20020806
AU 2002324029	B2	20050127		
EP 1416935	A1	20040512	EP 2002-758437	20020806
EP 1416935	B1	20080312		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002013401	A	20040831	BR 2002-13401	20020806
NO 2004001083	A2	20040928	NO 2004-1083	20020806
NO 2004001083	A3	20071228		
CN 1538847	A	20041020	CN 2002-815351	20020806
JP 2005503377	T	20050203	JP 2003-518550	20020806
JP 4147184	B2	20080910		
NZ 530824	A	20080926	NZ 2002-530824	20020806
EP 2116246	A2	20091111	EP 2004-106783	20020806
AT 388712	T	20080315	AT 2002-758437	20020806
PT 1416935	E	20080618	PT 2002-758437	20020806
ES 2302898	T3	20080801	ES 2002-758437	20020806
CN 101560214	A	20091021	CN 2009-10139877	20020806
HK 1064521	A1	20091126	HK 2004-778	20020906
ZA 2004002071	A	20041101	ZA 2004-271	20040114
US 2004024260	A1	20041202	US 2004-485747	20040203
US 7164773	B2	20070717		
NO 2004005040	A	20040205	NO 2004-540	20040205
MX 2004001191	A	20050317	MX 2004-1191	20040206
IN 2004CN00238	A	20051209	IN 2004-CN238	20040206
US 2004024899	A1	20041209	US 2004-783900	20040220
US 7323469	B2	20080129		
HK 1065483	A1	20090922	HK 2004-108357	20041025
US 2007161632	A1	20070712	US 2007-686023	20070314
US 7790905	B2	20080824		
PRIORITY APPLN. INFO.:			GB 2001-19249 A	20010807

L4 ANSWER 34 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CN 2002-813353 A3 20020906
WO 2002-EP8780 W 20020806
US 2004-485747 A2 20040203

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 138:170253
GI



I



II

AB The title compds. I [R1, R2 = H, alkyl, cycloalkyl, etc.; or NR1R2 = heterocyclyl; R3 = heterocyclyl, (un)substituted aryl; Q = alkylene, CO, alkyleneCO wherein the carbonyl group is attached to the NR1R2; Q = NH, O, with the proviso that Q = O if G = CO or alkyleneCO; X is either not present or alkylene, with the proviso that a heterocyclic radical R3 is bonded via a ring carbon if X is not present] and their salts, useful for treatment of a disease which responds to an inhibition of a protein tyrosine kinase, especially for the treatment of a proliferative disease, such as a tumor, were prepared and formulated. E.g., a 4-step synthesis of II, starting from Et 4-(4-chloro-7H-pyrrolo[2,3-d]pyrimidin-4-yl)benzoate and 3-chloro-4-fluoroaniline, was given. Compds. I were tested for their inhibition of the tyrosine kinase activity of EGF-R (HER-1), ErbB-2 (HER-2) and VEGF receptor (KDR) (data given for 23 exemplified compds.).
IT 497841-34-69
RL: BCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

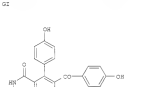
L4 ANSWER 34 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(prepn. of 4-amino-6-(phenyl-pyrrolo[2,3-d]pyrimidines as protein tyrosine kinase inhibitors)
RN 497841-34-6 CAPLUS
CN Benzonitrile, 4-(4,7-dihydro-4-oxo-3H-pyrrolo[2,3-d]pyrimidin-6-yl)- (CA INDEX NAME)

OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 35 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:17467 CAPLUS
DOCUMENT NUMBER: 138:184210
TITLE: Rigidins B-D, new pyrrolopyrimidine alkaloids from a tunicate Cystodytes species
AUTHOR(S): Tsuda, Masashi; Nozawa, Kohei; Shimbo, Kazutaka; Kobayashi, Jun'ichi
CORPORATE SOURCE: Graduate School of Pharmaceutical Sciences, Hokkaido University, Sapporo, 060-0812, Japan
SOURCE: Journal of Natural Products (2003), 66(2), 292-294
CODEN: JNPRDF; ISSN: 0163-3864
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

I

AB Three new pyrrolopyrimidine alkaloids, rigidins B-D (e.g. I, rigidin B), have been isolated from an Okinawan marine tunicate Cystodytes sp., and the structures were elucidated on the basis of spectroscopic data.
IT 132140-44-2, Rigidin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study); (pyrrolopyrimidine alkaloids from tunicate Cystodytes species)
RN 132140-44-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxybenzoyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)



IT 499104-90-4P, Rigidine B 499104-91-5P, Rigidine C 499104-92-6P, Rigidine D
RL: BPO (Natural product occurrence); PEP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(pyrrolopyrimidine alkaloids from tunicate Cystodytes species)
RN 499104-90-4 CAPLUS

L4 ANSWER 35 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxy-3-methoxybenzoyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)

RN 499104-91-5 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxybenzoyl)-5-(4-hydroxy-3-methoxyphenyl)- (CA INDEX NAME)

RN 499104-92-6 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxy-3-methoxybenzoyl)-5-(4-hydroxy-3-methoxyphenyl)- (CA INDEX NAME)

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 36 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2002:635610 CAPLUS
DOCUMENT NUMBER: 137:310888
TITLE: Synthesis of some new pyrrolo[2,3-d] pyrimidine-4-amines
AUTHOR(S): Elmy, Khalid Mohamed Hassan
CORPORATE SOURCE: Chemistry Department, Faculty of Science, Minoufiya University, Shebin El-Kom, Egypt
SOURCE: Afinidad (2002), 59(493), 147-150
CODEN: AFINAK; ISSN: 0001-9704
PUBLISHER: Asociacion de Quimicos del Instituto Quimico de Sarria
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 137:310888
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The reaction of 2-aminopyrrole-3-carbonitriles I (R1 = H, Cl, Me, R2 = H) with formic acid gave pyrrolo[2,3-d]pyrimidin-4(3H)-ones which afforded 4-chloropyrrolo[2,3-d]pyrimidines on reaction with phosphorus oxychloride. The latter afforded pyrrolo[2,3-d]pyrimidine-4-amines II (R1 = H, Cl, R2 = H; R1 = Me, R2 = Cl) by treatment with aromatic amines. On the other hand, treatment of compds. I (R1 = Cl, R2 = H; R1 = H, R2 = CF3) with formic acid in the presence of formamide and N,N-dimethylformamide afforded 4-aminopyrrolo[3,2-d]pyrimidines III.
IT 473289-23-3P 473289-24-4P 473289-25-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of pyrrolopyrimidinesamines via reaction of amino(cyano)pyrroles with formic acid and subsequent cyclization, chlorination, and substitution with aromatic amines)
RN 473289-23-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6,7-diphenyl- (CA INDEX NAME)

RN 473289-24-4 CAPLUS

L4 ANSWER 37 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2002:314913 CAPLUS
DOCUMENT NUMBER: 136:340689
TITLE: Preparation of urea derivatives containing nitrogenous aromatic ring compounds as inhibitors of angiogenesis
INVENTOR(S): Funabashi, Yasuhiro; Zuruzoku, Akihiko; Matsukura, Masayuki; Haneda, Toru; Fukuda, Yoshio; Kamata, Junichi; Takahashi, Keiko; Matsushima, Tomohiro; Miyazaki, Kaoru; Nonoyo, Kenichi; Watanabe, Tatsuo; Obaishi, Hiroshi; Yamaguchi, Atsuni; Suzuki, Sachi; Nakamura, Keisuji; Mimura, Fusayo; Yamamoto, Yuji; Matsui, Junji; Matsui, Kenji; Yoshiba, Takako; Suzuki, Yasuyuki; Aramoto, Itaru
PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan
SOURCE: PCT Int. Appl., 699 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002029272	A1	20020425	WO 2001-JP9221	20011019
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2426461	A1	20020425	CA 2001-2426461	20011019
AU 2001095986	A	20020429	AU 2001-95986	20011019
AU 2002020603	A2	20020429	AU 2002-20603	20011019
EP 2002020603	A3	20100528		
CN 1478218	A	20040225	CN 2001-819710	20011019
CN 1208318	C	20050706		
EP 1419997	A1	20040506	EP 2001-976786	20011019
EP 1419997	B1	20070228		
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EP 1506962	A2	20050216	EP 2004-25700	20011019
EP 1506962	A3	20050302		
EP 1506962	B1	20080702		
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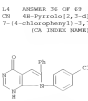
NZ 525324	A	20050324	NZ 2001-525324	20011019
JP 3712393	B2	20051102	JP 2002-536056	20011019
NO 2043989	C2	20051120	NO 2003-114740	20011019
AT 355275	T	20060315	AT 2001-976786	20011019
AU 2001295986	B2	20060817	AU 2001-295986	20011019
EP 1777218	A1	20070425	EP 2006-23078	20011019
EP 1777218	B1	20081231		
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR				

Habte 04/13/2010

L4 ANSWER 36 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-chlorophenyl)-3,7-dihydro-6-phenyl- (CA INDEX NAME)



RN 473289-25-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(4-methylphenyl)-6-phenyl- (CA INDEX NAME)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 37 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

			JP 2000-320420	A 20001020
			JP 2000-386195	A 20001220
			JP 2001-46685	A 20010222
			AU 2001-295986	A2 20011019
			AU 2001-95986	T0 20011019
			CN 2001-819710	A3 20011019
			EP 2001-976786	A3 20011019
			JP 2002-536056	A3 20011019
			WO 2001-JP9221	W 20011019
			US 2003-420466	A3 20030418
			JP 2005-124034	A3 20050421
			US 2005-293785	A1 20051202

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 136:340689
GI

L4 ANSWER 37 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

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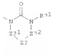
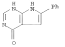


AB N-aryl or N-heteroarylurea derivs. represented by the general formula Ag-Xg-Yg-Tg1 or salts thereof, or hydrates of both [wherein Ag = (un)substituted C6-14 aryl or 5- to 14-membered heterocyclic group; Xg = single bond, O, S, C1-6 alkylene, SO, SO2, (un)substituted NH; Yg = (un)substituted C6-14 aryl, 5- to 14-membered heterocyclic group, C1-8 alkyl, C3-8 alicyclic hydrocarbyl, C6-14 aryl-C1-6 alkyl, 5- to 14-membered heteroaryl-C1-6 alkyl, (CH2)gSO2 (g = 1-8), (CH2)faCH:CH(CH2)fb (fa, fb = 0, 1,2,3), etc.; and Tg1 = a group of the general formula -Eg-CO-NRg1(Zg) or Q; wherein Eg = a single bond, (un)substituted NH; Rg1 = H, (un)substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, C3-8 aliphatic hydrocarbyl, etc.; Zg = C1-8 alkyl, C3-8 alicyclic hydrocarbyl, C6-14 aryl, etc.; Zg1, Zg2 = (a) a single bond, (b) C1-6 alkylene optionally having ≥1 atoms selected from O, S, and N in the middle or the terminus of the chain and optionally substituted with oxo, (c) (un)substituted C2-6 alkenyl] are prepared These compds. are also inhibitors of vascular endothelial growth factor receptor kinase (VEGFR2 kinase) and are useful as antitumor agents against hemangioma, pancreatic cancer, stomach cancer, colon cancer, breast cancer, prostate cancer, lung cancer, brain tumor, leukemia, or ovarian cancer, as cancer metastasis inhibitors, and for the treatment of retina neovascularization, diabetic retinopathy, atherosclerosis, or inflammatory diseases such as osteoarthritis, rheumatoid arthritis, psoriasis, or delayed hypersensitivity. Thus, to solution of 334 mg 4-[6-(4-benzyloxyphenyl)-7-(2-trimethylsilylethoxymethyl)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-2-chlorophenylamine in 4 mL DMF were added 0.066 mL pyridine and 0.102 mL Ph chlorocarbonate and stirred at room temperature for 2.5 h to give 330 mg N-[4-[6-(4-benzyloxyphenyl)-7-(2-trimethylsilylethoxymethyl)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-2-chlorophenyl]-N'-cyclopropylurea which (260 mg) was hydrogenolyzed over platinum oxide in ethanol overnight to give 160 mg

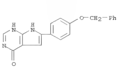
N-[4-[6-(4-hydroxyphenyl)-7-(2-trimethylsilylethoxymethyl)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-2-chlorophenyl]-N'-cyclopropylurea (I). I showed IC50 of 0.02 nM for inhibiting the vascular endothelial growth factor (VEGF)-stimulated sandwich tube formation in vascular endothelial cell.

IT 173458-99-6, 6-Phenyl-7H-pyrrolo[2,3-d]pyrimidin-4-ol
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of urea derivs. containing nitrogenous aromatic ring compds. as

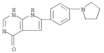
L4 ANSWER 37 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
angiogenesis inhibitors for prevention or treatment of diseases)
RN 173458-99-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-phenyl- (CA INDEX NAME)



IT 417721-40-5P 417723-61-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of urea derivs. containing nitrogenous aromatic ring compds. as angiogenesis inhibitors for prevention or treatment of diseases)
RN 417721-40-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-[4-(phenylmethoxy)phenyl]- (CA INDEX NAME)



RN 417723-61-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-[4-(1-pyrrolidinyl)phenyl]- (CA INDEX NAME)



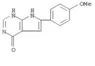
OS.CITING REF COUNT: 44 THERE ARE 44 CAPLUS RECORDS THAT CITE THIS RECORD (117 CITINGS)
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS

L4 ANSWER 37 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 38 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2002:132148 CAPLUS
DOCUMENT NUMBER: 136:318825
TITLE: Pyrrolo[2,3-d]pyrimidine and pyrazolo[3,4-d]pyrimidine derivatives as selective inhibitors of the EGF receptor tyrosine kinase
AUTHOR(S): Caravatti, G.; Bruggen, J.; Buchdunger, E.; Cozens, R.; Furet, P.; Lydon, N.; O'Reilly, T.; Traxler, P.
CORPORATE SOURCE: TA Oncology, Novartis Pharma AG, Basel, CH-4002, Switz.
SOURCE: ACS Symposium Series (2001), 796(Anticancer Agents), 231-244
CODEN: ACSMC8; ISSN: 0097-6156
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
OTHER SOURCE(S): CASREACT 136:318825

AB The EFG receptor tyrosine kinase (EGFR) is an attractive target for the development of agents directed against tumors which either overexpress the EGFR or which have a mutated or amplified gene encoding the EGFR. Several ATP-competitive inhibitors of this kinase have shown promising in vitro and in vivo efficacy and are currently in different stages of clin. development. One of them is PKI166, a pyrrolo[2,3-d]pyrimidine, which has been selected from a large series of pyrrolo[2,3-d]pyrimidines and structurally related pyrazolo[3,4-d]pyrimidines. The discovery and preclin. data of PKI166 are summarized.

IT 173458-97-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(pyrrolo[2,3-d]pyrimidine and pyrazolo[3,4-d]pyrimidine derivs. as selective inhibitors of the EGF receptor tyrosine kinase)
RN 173458-97-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-methoxyphenyl)- (CA INDEX NAME)

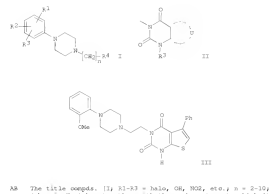


OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
REFERENCE COUNT: 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 39 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2002:909212 CAPLUS
DOCUMENT NUMBER: 136:56691
TITLE: Preparation of piperazinyl thienopyrimidine diones as selective α-1D adrenoceptor antagonists
INVENTOR(S): Meyer, Michael D.; Carell, William A.
PATENT ASSIGNEE(S): Abbott Laboratories, USA
SOURCE: U.S., 16 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

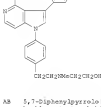
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6166019	A	20001226	US 1999-351090	19990709
PRIORITY APPLN. INFO.:			US 1998-92988P P	19980716

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 136:56691
GI



AB The title compds. [I; R1-R3 = halo, OH, NO2, etc.; n = 2-10; R4 = II (wherein U, taken together with the carbon atoms to which it is attached forms thieno ring, etc.)] and their pharmaceutically acceptable salts,

L4 ANSWER 40 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:380074 CAPLUS
DOCUMENT NUMBER: 133:150514
TITLE: Substituted 5,7-diphenylpyrrolo[2,3-d]pyrimidines: potent inhibitors of the tyrosine kinase c-Src
AUTHOR(S): Missbach, Martin; Altmann, Eva; Widler, Lony; Susa, Mira; Buchdunger, Elisabeth; Mett, Helmut; Meyer, Thomas; Green, Jonathan
CORPORATE SOURCE: Novartis Pharma AG, Therapeutic Areas Arthritis and Bone Metabolism, Basel, CH-4002, Switz.
SOURCE: Bioorganic & Medicinal Chemistry Letters (2000), 10(9), 945-949
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



AB 5,7-Diphenylpyrrolo[2,3-d]pyrimidines, e.g., I, represent a new class of highly potent inhibitors of the tyrosine kinase c-Src (IC50 <50 nM) with specificity against a panel of different tyrosine kinases. The substitution pattern on the two Ph rings dets. potency and specificity and provides a means to modulate cellular activity.

IT 287177-32-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(5,7-diphenylpyrrolo[2,3-d]pyrimidines as inhibitors of the tyrosine kinase c-Src)

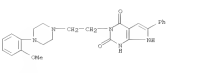
RN 287177-32-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,7-diphenyl- (CA INDEX NAME)

L4 ANSWER 39 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
which are selective alpha-1D adrenoceptor antagonists and may be useful for treating disease states such as hypertension, were prepd. E.g., a 4-step synthesis of III as methanesulfonate salt which showed Ki of 0.213 nM against α-1D binding, was given.

IT 255713-58-7 255713-59-8
RL: PRPH (Prophetic)
(Preparation of piperazinyl thienopyrimidine diones as selective α-1D adrenoceptor antagonists)

RN 255713-58-7 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-[2-methoxyphenyl)-1-piperazinyl]ethyl]-5-phenyl- (CA INDEX NAME)

RN 255713-59-8 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-[2-methoxyphenyl)-1-piperazinyl]ethyl]-6-phenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 40 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

OS.CITING REF COUNT: 41 THERE ARE 41 CAPLUS RECORDS THAT CITE THIS RECORD (42 CITINGS)
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 41 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:164884 CAPLUS
DOCUMENT NUMBER: 132:166253
TITLE: Process for the preparation of pyrrolo[2,3-d]pyrimidines
INVENTOR(S): Taylor, Edward C.; Lin, Min
PATENT ASSIGNEE(S): The Trustees of Princeton University, USA
SOURCE: PCT Int. Appl., 35 pp.
CODEN: PIXD2D
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000001904	A1	20000702	WO 1999-US18902	19990819
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6246722	A	20000523	US 1998-138354	19980821
CA 2338945	AA	20000702	CA 1999-2338945	19990819
AU 9953416	A	20000714	AU 1999-53416	19990819
EP 1105396	A1	20010613	EP 1999-941223	19990819
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, LT, LV, FI, RO				
JP 2002523427 T		20020730	JP 2000-566277	19990819
PRIORITY APPLN. INFO.:			US 1998-138354 A	19980821
			WO 1999-US18902 W	19990819

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): CASREACT 132:166253; MARPAT 132:166253
AB 4(3H)-X-7H-pyrrolo[2,3-d]pyrimidines in which X is O or NH are prepared by

(i) treating a 6-amino-4(3H)-X-pyrimidine with an (un)substituted 1-nitroalk-1-ene to yield a 6-amino-4(3H)-X-pyrimidine which is substituted in the 5-position by a 1-nitroalk-2-yl group, (ii) converting the 5-(1-nitroalk-2-yl)-6-amino-4(3H)-X-pyrimidine to the corresponding 5-(1-oxoalk-2-yl)-6-amino-4(3H)-X-pyrimidine, and (iii) cyclodehydration. Thus, treating 2,6-diamino-4(3H)-pyrimidone with 1-nitro-4-(4-ethoxycarbonylphenyl)-3-butene gives 1-nitro-2-(2,6-diamino-4(3H)-oxopyrimidin-5-yl)-4-(4-ethoxycarbonylphenyl)butane, which is then treated sequentially with base and acid, without isolation of the intermediate aldehyde, to form 4-[2-(2-amino-4(3H)-oxo-7H-pyrrolo[2,3-d]pyrimidin-5-yl)ethyl]benzoic acid, a valuable known chemical intermediate for the preparation of N-[4-[2-(2-hydroxy-4-amino-7H-pyrrolo[2,3-d]-pyrimidin-5-yl)ethyl]benzoyl]glutamic acid.
IT 259145-28-3P

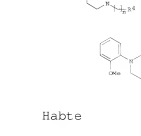
L4 ANSWER 41 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of pyrrolo[2,3-d]pyrimidines)
RN 259145-28-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-3,7-dihydro-5-phenyl- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 42 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:68462 CAPLUS
DOCUMENT NUMBER: 132:107962
TITLE: Preparation of piperazinylalkyl pyrimidinedione compounds selective for adrenoceptors
INVENTOR(S): Meyer, Michael D.; Carroll, William A.
PATENT ASSIGNEE(S): Abbott Laboratories, USA
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXD2D
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

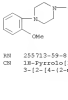
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000004027	A1	20000127	WO 1999-US15732	19990712
W: CA, CN, MX				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6153614	A	20001128	US 1998-116376	19980716
CA 2336939	AA	20000127	CA 1999-2336939	19990712
EP 1095044	A1	20010502	EP 1999-933919	19990712
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002526417 T		20020917	JP 2000-560133	19990712
MX 2001000487 A		20010622	MX 2001-487	20010115
PRIORITY APPLN. INFO.:			US 1998-116376 A	19980716
			WO 1999-US15732 W	19990712

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 132:107962
GI



L4 ANSWER 42 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
AB The title comps. [I; R1-R3 = halo, OH, NO2, etc.; R4 = II (wherein U taken together with the carbon atoms to which it is attached, forms a mono- or disubstituted 5-membered heterocycle having 4 carbon atoms, 2 double bonds, and one heteroatom selected from O, S, NH, N(alkyl); a mono or disubstituted 6-membered heterocycle containing 3 double bonds and either 1, 2 or 3 N atoms, etc.; R5 = H, alkyl, alkenyl, etc.); n = 2-10] and their pharmaceutically acceptable salts, which are selective α-1D adrenoceptor antagonists and may be useful for treating disease states such as benign prostatic hyperplasia, hypertension, detrusor instability and incontinence, were prepared. E.g., a 3-step synthesis of III.HeSO3H which showed K1 of 0.213 nM against e3D binding (rat), was given.
IT 259713-58-7P 259713-59-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of piperazinylalkyl pyrimidinedione compds. selective for adrenoceptors)
RN 259713-58-7 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-5-phenyl- (CA INDEX NAME)

RN 259713-59-8 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-6-phenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 43 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

L4 ANSWER 43 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1999:457818 CAPLUS
DOCUMENT NUMBER: 131:214251
TITLE: Synthesis and reactions of fluoroaryl substituted 2-amino-3-cyanopyrroles and pyrrolo[2,3-d]pyrimidines
AUTHOR(S): Bave, Chaitanya G.; Desai, Nirmal D.
CORPORATE SOURCE: Organic Syntheses Laboratory, M. G. Science Institute, Ahmedabad, 380 009, India
SOURCE: Journal of Heterocyclic Chemistry (1999), 36(3), 729-735
CODEN: JHTCAD; ISSN: 0022-152X
PUBLISHER: Heterocorporation
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Some fluoroaryl substituted 2-amino-3-cyanopyrroles were synthesized from the reaction between (2-bromo-1-arylalkylidene)propanedinitriles and fluoroaryl substituted aromatic amines under Gewald reaction condition, which on reaction with formamide and formic acid gave 4-aminopyrrolo[2,3-d]pyrimidines and pyrrolo[2,3-d]-pyrimidin-4(3H)-ones (6), resp. 4-Chloropyrrolo[2,3-d]pyrimidines were prepared by chlorination of 4 with P oxychloride, which on hydrazinolysis provided 4-hydrazinopyrrolo[2,3-d]pyrimidines.
IT 243665-93-2P 243665-94-3P 243665-95-4P
243665-96-5P 243665-97-6P 243665-98-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and reactions of fluoroaryl substituted aminocyanopyrroles and pyrrolo[2,3-d]pyrimidines)
RN 243665-93-2 CAPLUS
CN 6H-Pyrrolo[2,3-d]pyrimidin-6-one, 7-(4-fluorophenyl)-3,7-dihydro-5-phenyl- (CA INDEX NAME)

RN 243665-94-3 CAPLUS
CN 6H-Pyrrolo[2,3-d]pyrimidin-6-one, 7-(3-chloro-4-fluorophenyl)-3,7-dihydro-5-phenyl- (CA INDEX NAME)

L4 ANSWER 43 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 243665-95-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-fluorophenyl)-3,7-dihydro-5-(4-methoxyphenyl)- (CA INDEX NAME)

RN 243665-96-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(3-chloro-4-fluorophenyl)-3,7-dihydro-5-(4-methoxyphenyl)- (CA INDEX NAME)

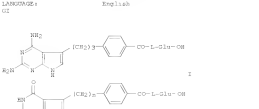
RN 243665-97-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(4-chlorophenyl)-7-(4-fluorophenyl)-3,7-dihydro- (CA INDEX NAME)

L4 ANSWER 43 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 243665-98-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(3-chloro-4-fluorophenyl)-5-(4-chlorophenyl)-3,7-dihydro- (CA INDEX NAME)

OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

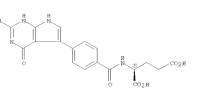
L4 ANSWER 44 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1999:221263 CAPLUS
DOCUMENT NUMBER: 131:88150
TITLE: Exploration of a new route to fused pyrroles: synthesis of 7HP-351, homo-MTA and 5-arylpyrrolo[2,3-d]pyrimidines
AUTHOR(S): Taylor, Edward C.; Liu, Bin
CORPORATE SOURCE: Department of Chemistry, Princeton University, Princeton, NJ, 08544, USA
SOURCE: Tetrahedron Letters (1999), 40(21), 4027-4030
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



AB The authors have developed a new methodol. for the construction of pyrrolo[2,3-d]pyrimidines that involves Michael addition of 2,4-dianino-4[3H]-pyrimidinone or 2,4,6-triaminopyrimidines to nitroolefins, followed by a Nef reaction of the resulting adduct to form an intermediate aldehyde that spontaneously cyclizes to the fused pyrrole ring. This methodol. has been used in a new synthesis of 7HP-351 (I, and for the first reported preparation of homo-LY231514, [homo-MTA; II; n = 3], and 5-arylpyrrolo[2,3-d]pyrimidine II (n = 0).
IT 229471-25-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(syntheses of 7HP-351, homo-MTA and 5-arylpyrrolo[2,3-d]pyrinidines)
RN 229471-25-4 CAPLUS
CN L-Glutamic acid, N-[4-[2-amino-4,7-dihydro-4-oxo-1H-pyrrolo[2,3-d]pyrimidin-5-yl]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 44 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

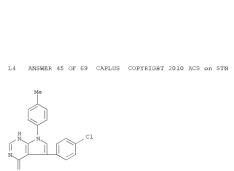


OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

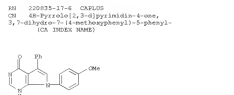
L4 ANSWER 45 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1999:71276 CAPLUS
DOCUMENT NUMBER: 130:196617
TITLE: Synthesis of 7H-Tetrazolo[1,5-e]pyrrolo[3,2-e]pyrimidines and their reductive ring cleavage to 4-aminopyrrolo[2,3-d]pyrimidines
AUTHOR(S): Dave, Chaitanya G.; Shah, Rina D.
CORPORATE SOURCE: Organic Syntheses Laboratory, M. G. Science Institute, Ahmedabad, 300 009, India
SOURCE: Journal of Heterocyclic Chemistry (1998), 35(6), 1295-1300
CODEN: JHTCAD; ISSN: 0022-152X
PUBLISHER: HeteroCorporation
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 130:196617
GI

AB Some new 7,9-disubstituted 7H-tetrazolo[1,5-e]pyrrolo[3,2-e]pyrimidines (I; R = H, MeO, Cl; R1 = MeO, Br, I, Me) have been synthesized either by diazotization of 4-amino-7H-pyrrolo[2,3-d]pyrimidines (II; same R, R1; R2 = NHNH2), obtained by hydrazinolysis of II (R2 = Cl) or via a substitution reaction between II (R2 = Cl) and sodium azide. 5,7-Disubstituted 7H-pyrrolo[2,3-d]pyrimidin-4(3H)-ones were obtained by cyclocondensation of 3,4-disubstituted 2-amino-3-cyanopyroles with formic acid; subsequent chlorination using phosphorus oxychloride afforded II (R2 = Cl). A novel route to II (R2 = NH2) via reductive ring cleavage of I has been reported.
IT 170464-79-6P 229835-17-6P 229835-18-7P
229835-19-8P 229835-20-1P 229835-21-2P
229835-22-3P 229835-23-4P 229835-24-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 7H-tetrazolo[1,5-c]pyrrolo[3,2-e]pyrimidines and their reductive ring cleavage to 4-aminopyrrolo[2,3-d]pyrimidines)
RN 170464-79-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(4-chlorophenyl)-3,7-dihydro-7-(4-methylphenyl)- (CA INDEX NAME)

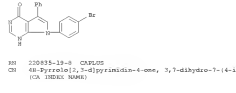
L4 ANSWER 45 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 229835-17-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(4-methoxyphenyl)-5-phenyl- (CA INDEX NAME)



RN 229835-18-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-bromophenyl)-3,7-dihydro-5-phenyl- (CA INDEX NAME)



RN 229835-19-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(4-iodophenyl)-5-phenyl- (CA INDEX NAME)

L4 ANSWER 45 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 220875-08-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-bromophenyl)-3,7-dihydro-5-(4-methoxyphenyl)- (CA INDEX NAME)

RN 220835-21-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(4-iodophenyl)-5-(4-methoxyphenyl)- (CA INDEX NAME)

RN 220835-22-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(4-chlorophenyl)-3,7-dihydro-7-(4-methoxyphenyl)- (CA INDEX NAME)

L4 ANSWER 45 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

OS.CITING REF COUNT: 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 45 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 220835-23-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-bromophenyl)-5-(4-chlorophenyl)-3,7-dihydro- (CA INDEX NAME)

RN 220835-24-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(4-chlorophenyl)-3,7-dihydro-7-(4-iodophenyl)- (CA INDEX NAME)

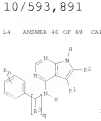
L4 ANSWER 46 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1998:147732 CAPLUS
DOCUMENT NUMBER: 128:192664
ORIGINAL REFERENCE NO.: 128:38070a,38070a
TITLE: Preparation of substituted pyrrolopyrimidines as antitumor agents
INVENTOR(S): Traxler, Peter; Bold, Guido; Lang, Marc; Freu, Jorg
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Traxler, Peter; Bold, Guido; Lang, Marc; Freu, Jorg
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9807726	A1	19980226	WO 1997-EP4564	19970821
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CN 1194647	A	19980930	CN 1996-196640	19960624
CN 1100078	C	20030205		
CA 2262421	A1	19980226	CA 1997-2262421	19970821
CA 2262421	C	20071002		
AU 9742064	A	19980306	AU 1997-42064	19970821
AU 720428	B2	20000601		
EP 935486	A1	19990901	EP 1997-940108	19970821
EP 935486	B1	20080116		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2000516626	T	20001212	JP 1998-510405	19970821
JP 4242925	B2	20090325		
AT 394062	T	20080215	AT 1997-940108	19970821
PT 935486	T	20080227	PT 1997-940108	19970821
ES 2297864	T3	20080501	ES 1997-940108	19970821
US 6180636	B1	20010130	US 1999-242592	19990219
PRIORITY APPLN. INFO.:			CH 1996-2071 A	19960823
			CH 1995-1976 A	19950706
			WO 1997-EP4564 A	19970821

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSDS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 128:192664
GI

L4 ANSWER 46 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



I

AB The title compds. [I; n = 0-3; q = 0-1; R = halo, lower alkyl, HOCH2, etc.; one of the radicals R1 and R2 = H, lower alkyl, and the other of the radicals R1 and R2 = (un)substituted Ph, amino-lower alkyl, piperidine-1-carbonyl, etc.], inhibitors of the tyrosine kinase activity of the receptor for the epidermal growth factor (EGF) and c-erbB2kinase and therefore useful as antitumor agents, were prepared and formulated. Thus, hydrogenation of 4-(3-chloroanilino)-6-formyl-7H-pyrrolo[2,3-d]pyrimidine (preparation described) with N-methylpiperazine in the presence of Raney Ni in DMSO, AcOH and MeOH afforded I [R = 3-Cl; R1 = H; R2 = 4-methylpiperazin-1-ylmethyl; q = 0]. Compds. I inhibit EGF-R-TYK activity by 50% (IC50), for example in a concentration of 0.0005-1 μM, especially from 0.001-1 μM. Compds. I are effective at 0.5-2 g/day when administered to a patient of a body weight of about 70 kg.

IT 187724-99-6P

RL: FCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of substituted pyrrolopyridines as antitumor agents)

RN 187724-99-6 CAPLUS

CN 6H-Pyrrolo[2,3-d]pyrimidin-6-one, 3,7-dihydro-6-(4-nitrophenyl)- (CA INDEX NAME)

OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 47 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1997:525841 CAPLUS

DOCUMENT NUMBER: 127:190749

ORIGINAL REFERENCE NO.: 127:36997a,37000a

TITLE: Preparation of pyrrolopyrimidines as inhibitors of protein kinases

INVENTOR(S): Traxler, Peter; Frei, Jorg; Bold, Guido

PATENT ASSIGNEE(S): Novartis A.-G, Switz.; Traxler, Peter; Frei, Jorg; Bold, Guido

SOURCE: PCT Int. Appl., 69 pp.

CODEN: PIXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9727199	A1	19970731	WO 1997-EP127	19970113
W: AL, AM, AT, AU, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2242354	A1	19970731	CA 1997-2242354	19970113
CA 2242354	C	20060725		
AU 9714414	A	19970820	AU 1997-14414	19970113
EP 888349	A1	19990107	EP 1997-901014	19970113
EP 888349	B2	20050622		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2000515905	T	20000704	JP 1997-523897	19970113
JP 4276733	B2	20090610		
AT 217873	T	20020615	AT 1997-901014	19970113
PT 888349	E	20021031	PT 1997-901014	19970113
ES 2177915	T3	20021216	ES 1997-901014	19970113
US 6140357	A	20001031	US 1998-117056	19980702
PRIORITY APPLN. INFO.:			CH 1996-175	A 19960125
			WO 1997-EP127	W 19970113

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 127:190749

GI

L4 ANSWER 47 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

I

II

III

AB The title compds. [I; R1, R2 = lower alkyl, alkoxy, (un)substituted Ph, etc.; Q = heterocyclyl II bonded via a ring nitrogen atom (wherein n, n = 0-3; R3, R4 = lower alkyl, alkenyl, halo, etc.; A = 5-9 membered heterocyclyl; B = free or benzo-, thieno-, furo-, pyrrolo- or dihydropyrrolo-fused carbocyclic ring having from 5-9 carbon atoms)], inhibitors of protein kinases which are useful in the treatment of a tumor disease or psoriasis, were prepared and formulated. Thus, reaction of 4-chloro-5,6-dimethyl-7H-pyrrolo[2,3-d]pyrimidine with 2,3-dihydroindole in BuOH afforded the title compound III which showed IC50 of 1.56 μM against EGF-receptor-specific tyrosine kinase.

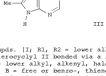
IT 187724-99-6P

RL: FCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of pyrrolopyrimidines as inhibitors of protein kinases)

RN 187724-99-6 CAPLUS

CN 6H-Pyrrolo[2,3-d]pyrimidin-6-one, 3,7-dihydro-6-(4-nitrophenyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS

L4 ANSWER 47 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

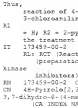
L4 ANSWER 48 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1997:204107 CAPLUS
DOCUMENT NUMBER: 126:199578
ORIGINAL REFERENCE NO.: 126:38581a,38586a
TITLE: Preparation of 7H-pyrrolo[2,3-d]pyrimidines as tyrosine protein kinase inhibitors
INVENTOR(S): Traxler, Peter; Bold, Guido; Brill, Wolfgang
Karl-Diether; Frei, Joerg
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.; Traxler, Peter; Bold, Guido; Brill, Wolfgang, Karl-Diether; Frei, Joerg
SOURCE: PCT Int. Appl., 107 pp.
CODEN: PIXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9702266	A1	19970123	WO 1996-EP2728	19960624
W: AL, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2224435	A1	19970123	CA 1996-2224435	19960624
CA 2224435	C	20080805		
AU 9664148	A	19970205	AU 1996-64148	19960624
AU 707626	B2	19990715		
EP 836605	A1	19980422	EP 1996-923893	19960624
EP 836605	B1	20020206		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
ES 2169809	T	19990727	JP 1997-504763	19960624
JP 11508570	T	19990727		
JP 4146514	B2	20080910		
AT 212993	T	20020215	AT 1996-923893	19960624
PT 836605	E	20020731	PT 1996-923893	19960624
ES 2172670	T3	20021001	ES 1996-923893	19960624
IL 122855	A	20040831	IL 1996-122855	19960624
FI 188959	B1	20050531	FI 1996-5405	19960624
ZA 9605723	A	19970106	ZA 1996-5723	19960705
TW 472057	B	20020111	TW 1996-85100440	19960710
NO 9705956	A	19980210	NO 1997-5956	19971218
NO 310359	B1	20010625		
US 6140332	A	20001031	US 1998-981877	19980126
HK 1008222	A1	20021018	HK 1998-109298	19980702
PRIORITY APPLN. INFO.:			CH 1995-1976	A 19950706
			CH 1995-2498	A 19950901

L4 ANSWER 48 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CH 1995-3198 A 19951110
CH 1996-255 A 19960201
CH 1996-1224 A 19960513
WO 1996-EP2728 W 19960624

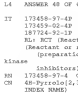
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSOS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 126:199578
GI

AB The title compds. [I; R = halo, lower alkyl, OH, etc.; R1, R2 = H, (un)substituted Ph, pyridyl, etc.; R1R2 = (un)substituted C4-10 1,4-alkadienylene; R6 = H, lower alkyl, lower alkoxycarbonyl, etc.; q = 0-1; n = 1-3 when q = 0; n = 0-3 when q = 1], which inhibit tyrosine protein kinase and can be used in the treatment of hyperproliferative diseases, for example tumor diseases, were prepared and formulated. Thus, reaction of 4-chloro-6-(pyrid-2-yl)-7H-pyrrolo[2,3-d]pyrimidine with 3-chloroaniline in the presence of DMPU in n-BuOH afforded I [R = 3-Cl; R1 = R2 = 2-pyridyl; q = 0]. Compds. I are effective at 0.5-2 g/day in the treatment of an individual having a body weight of about 70 kg.
IT 173458-20-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of 7H-pyrrolo[2,3-d]pyrimidines as tyrosine protein kinase inhibitors)
RN 173458-20-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-methoxyphenyl)-5-methyl- (CA INDEX NAME)

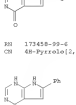


L4 ANSWER 48 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

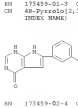
IT 173458-97-4P 173458-99-6P 173459-01-3P
173459-02-4P 187724-80-7P 187724-89-6P
187724-92-1P 187724-95-4P
RL: RCT (Reactant); SYN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 7H-pyrrolo[2,3-d]pyrimidines as tyrosine protein kinase inhibitors)
RN 173458-97-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-methoxyphenyl)- (CA INDEX NAME)



RN 173458-99-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-phenyl- (CA INDEX NAME)



RN 173459-01-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(3-methoxyphenyl)- (CA INDEX NAME)



RN 173459-02-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(2-methoxyphenyl)- (CA INDEX NAME)

L4 ANSWER 48 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 187724-88-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 6-[1,1'-biphenyl]-4-yl-3,7-dihydro- (CA INDEX NAME)

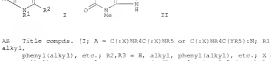
RN 187724-89-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-nitrophenyl)- (CA INDEX NAME)

RN 187724-92-1 CAPLUS
CN Benzoic acid, 4-(4,7-dihydro-4-oxo-3H-pyrrolo[2,3-d]pyrimidin-6-yl)-, ethyl ester (CA INDEX NAME)

L4 ANSWER 49 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:76848 CAPLUS
DOCUMENT NUMBER: 124:93363
ORIGINAL REFERENCE NO.: 124:16381a,16384a
TITLE: Preparation of pyrrolodiazines as stabilizers for chlorine-containing polymer
INVENTOR(S): Wehner, Wolfgang; Friedrich, Hans-Helmut; Drewes, Rolf
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Can. Pat. Appl., 88 pp.
CODEN: CPXXEB
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2172692	A1	19960929	CA 1996-2172692	19960326
TW 426683	B	20010321	TW 1996-85103154	19960316
US 5770643	A	19980623	US 1996-618591	19960320
AU 9648232	A	19961010	AU 1996-48232	19960321
AU 702566	B2	19990225		
JP 08282979	A	19961015	JP 1996-95852	19960326
IL 117652	A	20000601	IL 1996-117652	19960326
NO 9601256	A	19960930	NO 1996-1256	19960327
ZA 9602437	A	19961001	ZA 1996-2437	19960327
BR 9601178	A	19980331	BR 1996-1178	19960328
US 6020004	A	19991214	US 1998-7196	19980114
PRIORITY APPLN. INFO.:			EP 1995-810204 A	19950328
			US 1996-618591 A3	19960320

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 124:93363
GI



AB Title compds. [I; A = C(:X)NR4C(:X)NR5 or C(:X)NR4C(YR5):N; R1 = H, alkyl, phenyl(alkyl), etc.; R2,R3 = H, alkyl, phenyl(alkyl), etc.; X = O, S, (alkyl)imino, etc.] were prepared Thus, 4-amino-1,3-dimethyluracil was cyclocondensed with ClCH2COMe to give title compound II. Data for performance of I were given.
IT 183373-21-9P 183373-26-4P
RL: NOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(preparation of pyrrolodiazines as stabilizers for chlorine-containing polymer)

L4 ANSWER 48 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 187724-95-4 CAPLUS
CN Benzoic acid, 3-(4,7-dihydro-4-oxo-3H-pyrrolo[2,3-d]pyrimidin-6-yl)-, ethyl ester (CA INDEX NAME)

OS.CITING REF COUNT: 29 THERE ARE 29 CAPLUS RECORDS THAT CITE THIS RECORD (30 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 49 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 183373-21-9 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-phenyl- (CA INDEX NAME)

RN 183373-26-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-2-methoxy-6-phenyl- (CA INDEX NAME)

L4 ANSWER 50 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:721646 CAPLUS
DOCUMENT NUMBER: 125:330527
ORIGINAL REFERENCE NO.: 125:6190a,6191a
TITLE: Derivatives of pyrrolodiazine as stabilizers for polymers containing chlorine
INVENTOR(S): Wehmer, Wolfgang; Friedrich, Hans-Helmut; Drewes, Rolf
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Eur. Pat. Appl., 65 pp.
CODEN: EPXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 726549	A1	19960814	EP 1996-810172	19960319
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE				
TW 426681	B	20010321	TW 1996-85103154	19960316
US 5770643	A	19980623	US 1996-618591	19960320
AU 9648372	A1	19961010	AU 1996-48372	19960321
NO 9601256	A2	19960925		
JP 08269279	A	19961015	JP 1996-95952	19960326
IL 117652	A	20000601	IL 1996-117652	19960326
NO 9601256	A	19960930	NO 1996-1256	19960327
ZA 9602437	A	19961001	ZA 1996-2437	19960327
BR 9601178	A	19980331	BR 1996-1178	19960328
US 6020044	A	19991214	US 1998-7196	19980114
PRIORITY APPLN. INFO.:			EP 1995-810204	A 19950328
			US 1996-618591	A3 19960320

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 125:330527
GI

AB Pyrrolodiazines of specified structure are good stabilizers for polymers containing Cl, especially PVC. Refluxing 1,7-dimethylurea(1 1.0), chloroacetone 1.1, and 1840cm 2.0 mol in H2O for 14 h gave 55% pyrrolodiazinedione I. Heating compounded PVC containing 1.0 phr I at 190° for 30 min gave PVC with yellowness index 62.0; vs. 143.4 after 25 min in the absence of I.

L4 ANSWER 51 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:178021 CAPLUS
DOCUMENT NUMBER: 124:331709
ORIGINAL REFERENCE NO.: 124:6120a,6120a
TITLE: 4-(Phenylamino)pyrrolopyrimidines: Potent and Selective, ATP Site Directed Inhibitors of the EGF-Receptor Protein Tyrosine Kinase
AUTHOR(S): Traxler, Peter M.; Furet, Pascal; Mett, Helmut; Buchdunger, Elisabeth; Meyer, Thomas; Lydon, Nicholas
CORPORATE SOURCE: Cancer and Bone Metabolism Research Department, CIBA Limited, Basel, CH-4002, Switz.
SOURCE: Journal of Medicinal Chemistry (1996), 39(12), 2285-2292
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Using a pharmacophore model for ATP-competitive inhibitors interacting with the active site of the EGF-R protein tyrosine kinase (PTK), 4-(phenylanilno)-7H-pyrrolo[2,3-d]pyrimidines have been identified as a novel class of potent EGF-R protein tyrosine kinase inhibitors. In an interactive process, this class of compds. was then optimized. The most potent compds. of this series inhibited the EGF-R PTK with IC50 values in the low nanomolar range. High selectivity toward a panel of nonreceptor tyrosine kinases (c-Src, v-Abl) and serine/threonine kinases (PKC α, PKA) was observed. Kinetic anal. revealed competitive type kinetics relative to ATP. In cells, EGF-stimulated cellular tyrosine phosphorylation was inhibited by 4 compds. at IC50 values between 0.1 and 0.4 μM, whereas PDGF-induced tyrosine phosphorylation was not affected by concns. up to 10 μM. In addition, these compds. were able to selectively inhibit c-fos mRNA expression in EGF-dependent cell lines with IC50 values between 0.1 and 2 μM, but did not affect c-fos mRNA induction in response to PDGF or PMA (IC50 >100 μM). Proliferation of the EGF-dependent MK cell line was inhibited with similar IC50 values. From SAR studies, a binding mode for 4-(phenylanilno)-7H-pyrrolo[2,3-d]pyrimidines as well as for the structurally related 4-(phenylanilno)quinazolines at the ATP-binding site of the EGF-R protein tyrosine kinase is proposed. 4-(Phenylamino)-7H-pyrrolo[2,3-d]pyrimidines therefore represent a new class of highly potent tyrosine kinase inhibitors which preferentially inhibit the EGF-mediated signal transduction pathway and have the potential for further evaluation as antitumor agents.
IT 177438-79-2P 176915-50-7P
RL: RCT (Reactant); RPR (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(phenylaminopyrrolopyrimidines: potent and selective, ATP site directed
inhibitors of EGF-receptor protein tyrosine kinase)
RN 177438-79-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,6-diphenyl-7-(phenylmethyl)- (CA INDEX NAME)

L4 ANSWER 50 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
IT 183773-21-9P 183773-24-4P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(preparation as heat stabilizer for chlorinated polymers)
RN 183773-21-9 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-phenyl- (CA INDEX NAME)

RN 183773-24-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-2-methoxy-6-phenyl- (CA INDEX NAME)

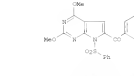
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L4 ANSWER 51 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 176915-50-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-methyl-5-phenyl-7-(phenylmethyl)- (CA INDEX NAME)

OS.CITING REF COUNT: 101 THERE ARE 101 CAPLUS RECORDS THAT CITE THIS RECORD (102 CITINGS)

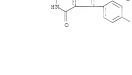
L4 ANSWER 52 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:147589 CAPLUS
DOCUMENT NUMBER: 124:289977
ORIGINAL REFERENCE NO.: 124:53781a,53784a
TITLE: Condensed heteroaromatic ring systems. Part 24. Synthesis of rigidin, a pyrrolo[2,3-d]pyrimidine marine alkaloid
AUTHOR(S): Sakaguchi, Takao; Nordo, Yoshinori; Sato, Shuichiro; Yamaoka, Hiroshi
CORPORATE SOURCE: Fac. Pharmaceutical Sci., Tohoku Univ., Sendai, 980-77, Japan
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1996), (5), 459-64
CODEN: JCPRB4; ISSN: 0300-922X
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 124:289977
GI



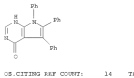
II

AB The marine alkaloid rigidin was synthesized from 2,4-dimethoxy-7-phenylsulfonylpyrrolo[2,3-d]pyrimidine (I). Lithiation of I followed by electrophilic substitution with N,4-dimethoxy-N-methylbenzamide afforded 6-[4-methoxybenzoyl derivative II, which by alkaline hydrolysis and subsequent iodination was converted into 2,4-dimethoxy-5-iodopyrrolo[2,3-d]pyrimidin-6-yl 4-methoxyphenyl ketone. The palladium-catalyzed arylation of this ketone with 2-(4-methoxyphenyl)-1,3,2-dioxaborinane followed by demethylation with boron tribromide gave rigidin.
IT 132160-44-2P, Rigidin
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of rigidin, a pyrrolo[2,3-d]pyrimidine marine alkaloid)
RN 132160-44-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxybenzoyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)

L4 ANSWER 53 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:152691 CAPLUS
DOCUMENT NUMBER: 124:261553
ORIGINAL REFERENCE NO.: 124:48475a,48478a
TITLE: New synthetic routes to 5-substituted pyrrolo[2,3-d]pyrimidines. total synthesis of rigidin and 2'-deoxy-cadeguomycin. synthesis and characterization of novel mesoionic imidazo[1,2-c]pyrimidine-3-ones
AUTHOR(S): Wei, Yuan
CORPORATE SOURCE: Utah State Univ., Logan, UT, USA
SOURCE: 1995; 338 pp. Avail.: Univ. Microfilms Int., Order No. DA9602501
From: Diss. Abstr. Int., B 1995, 56(9), 4894
DOCUMENT TYPE: Dissertation
LANGUAGE: English
AB Unavailable
IT 132160-44-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(total synthesis of rigidin and deoxyoadeguomycin and preparation and characterization of mesoionic imidazopyrimidinones)
RN 132160-44-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxybenzoyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)

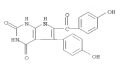


L4 ANSWER 54 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:97030 CAPLUS
DOCUMENT NUMBER: 124:260966
ORIGINAL REFERENCE NO.: 124:48547a,48350a
TITLE: Synthesis of fused pyrimidinones by reaction of aminoazirenecarboxamide with esters; preparation of pyrrolo[2,3-d]-, thieno[2,3-d]-, isoxazolo[5,4-d]-, and 1,2,3-triazolo[4,5-d]pyrimidinones, and -quinazolones
AUTHOR(S): Miyashita, Akira; Fujimoto, Katsuhiro; Okada, Tomomi; Higashino, Takeo
CORPORATE SOURCE: Sch. Pharm. Sci., Univ. Shizuoka, Shizuoka, 422, Japan
SOURCE: Heterocycles (1996), 42(2), 691-9
CODEN: HTCYAM; ISSN: 0385-5414
PUBLISHER: Japan Institute of Heterocyclic Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 124:260966
AB Several fused pyrimidinones were synthesized by reaction of aminoazirenecarboxamide with esters in moderate to good yields. In the presence of sodium ethoxide, treatments of 5-amino-1-phenyl-3-pyrrolecarboxamide, 2-amino-3-thiophenecarboxamide, 3-amino-4-isoxazolecarboxamide, 4-amino-1,2,3-triazole-5-carboxamide, and o-aminobenzamide with esters such as Et formate and Et acetate led to the corresponding pyrrolo[2,3-d]- and thieno[2,3-d]pyrimidin-4(3H)-ones, isoxazolo[5,4-d]pyrimidin-4(5H)-ones, 1,2,3-triazolo[4,5-d]pyrimidin-7(6H)-ones, and -4(3H)-quinazolones, resp.
IT 175348-05-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 175348-05-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,6,7-triphenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

L4 ANSWER 52 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

L4 ANSWER 55 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1995:398042 CAPLUS
DOCUMENT NUMBER: 124:176133
ORIGINAL REFERENCE NO.: 124:32647a,32670a
TITLE: Preparation of 4-anilino-7H-pyrrolo[2,3-d]pyrimidines with antiproliferative activity
INVENTOR(S): Traxler, Peter; Furet, Pascal; Brill, Wolfgang K. D.
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Eur. Pat. Appl., 71 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 680967	A1	19951115	EP 1995-810271	19950425
EP 680967	B1	19971215		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
TW 379029	B	20000111	TW 1995-84104001	19950424
AT 159357	T	19971115	AT 1995-810271	19950425
ES 2109796	T3	19980116	ES 1995-810271	19950425
AU 9517702	A	19951109	AU 1995-17702	19950427
AU 693244	B2	19980813		
FI 9502033	A	19951104	FI 1995-2033	19950428
HU 71818	A2	19960228	HU 1995-1230	19950428
CA 2148324	A1	19951104	CA 1995-2148324	19950501
JP 08053454	A	19960227	JP 1995-107305	19950501
JP 3042760	B2	20000522		
ZA 9503495	A	19951103	ZA 1995-3495	19950502
NO 9501684	A	19951106	NO 1995-1684	19950502
CN 1128263	A	19960807	CN 1995-105418	19950502
US 5608457	A	19970311	US 1995-434419	19950503
US 6296749	A	20001001	US 1998-53266	19980401
PRIORITY APPLN. INFO.:			CH 1994-1380	A 19940503
			CH 1995-245	A 19950130
			US 1995-434419	A1 19950503
			US 1997-889388	B1 19970708

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 124:176133
GI

L4 ANSWER 55 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

I

AB Title compds. [I; n = 0-5; R = halo, alkyl, CF3, alkoxy; R1, R2 = alkyl, (substituted) Ph; 1 of R1, R2 can = H; R1R2 = (alkyl-substituted) C2-5 alkylene], were prepared. Thus, 4-(m-chloroanilino)-5,6-dimethyl-7-benzylpyrrolo[2,3-d]pyrimidine (preparation from 2-amino-4,5-dimethyl-3-benzyl-3-cyanopyrrole given) was refluxed 2 h with AlCl3 in PhMe to give 4-(m-chloroanilino)-5,6-dimethyl-7H-pyrrolo[2,3-d]pyrimidine. The latter at 1.56 mg/kg/day orally in nude transplanted with A431 tumors gave a T/C of 45-61%.

IT 173458-79-2P 173459-97-4P 173458-98-5P
173458-99-6P 173459-00-2P 173459-01-3P
173459-02-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 4-anilino-7H-pyrrolo[2,3-d]pyrimidines with antiproliferative activity)

RN 173458-79-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,6-diphenyl-7-(phenylmethyl)- (CA INDEX NAME)

RN 173458-97-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-methoxyphenyl)- (CA INDEX NAME)

L4 ANSWER 55 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 173458-98-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 6-(2,5-dimethoxyphenyl)-3,7-dihydro- (CA INDEX NAME)

RN 173458-99-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-phenyl- (CA INDEX NAME)

RN 173459-00-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-methoxyphenyl)-5-methyl- (CA INDEX NAME)

RN 173459-01-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(3-methoxyphenyl)- (CA INDEX NAME)

L4 ANSWER 55 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

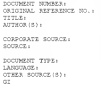
RN 173459-02-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(2-methoxyphenyl)- (CA INDEX NAME)

OS.CITING REF COUNT: 29 THERE ARE 29 CAPLUS RECORDS THAT CITE THIS RECORD (31 CITINGS)

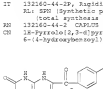
L4 ANSWER 56 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1995:718310 CAPLUS
DOCUMENT NUMBER: 123:339796
ORIGINAL REFERENCE NO.: 123:6287a,6289a
TITLE: Pyrrolo[2,3-d]pyrimidines. Part 1. Synthesis of novel pyrrolo[2,3-d]pyrimidine derivatives with antimicrobial activity
AUTHOR(S): El-Bayouki, Khairy A. M.; Basyouni, Wahid M.; Hozzi, Hatem; El-Deen, A. Shehab
CORPORATE SOURCE: National Research Center, Cairo, Egypt
SOURCE: Journal of Chemical Research, Synopses (1995), (8), 314-15
CODEN: JCRSDC; ISSN: 0308-2342
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 123:339796
AB 2-Aminopyrrole-3-carbonitriles have been prepared as precursors for synthesizing triazole-, tetrazole-, and 4-(7,5-dimethylpyrrolo[pyrrolopyrimidine, as well as a 3-[pyrrolo(pyrimidinyl)hydrazono]butanoate ester; antimicrobial screening of some selected examples from the synthesized products was carried out.
IT 170464-90-9
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); RIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of pyrrolo[2,3-d]pyrimidine derivs. with antimicrobial activity)
RN 170464-90-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(4-fluorophenyl)-3,7-dihydro-7-(4-methylphenyl)- (CA INDEX NAME)

IT 170464-79-69
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of pyrrolo[2,3-d]pyrimidine derivs. with antimicrobial activity)
RN 170464-79-6 CAPLUS

L4 ANSWER 57 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:475957 CAPLUS
DOCUMENT NUMBER: 121:35957
ORIGINAL REFERENCE NO.: 121:6665a,6666a
TITLE: Total synthesis of a marine alkaloid, rigidin
AUTHOR(S): Sakaguchi, Takao; Kondo, Yoshinori; Sato, Shuichiro; Yamanaka, Hiroshi
CORPORATE SOURCE: Pharm. Inst., Tohoku Univ., Sendai, 980, Japan
SOURCE: Tetrahedron Letters (1994), 35(18), 2919-20
CODEN: TELAEY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 121:35957
GI

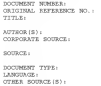


AB Rigidin (I), a marine alkaloid, was synthesized by the combination of arylation via lithiation and arylation by palladium-catalyzed reaction starting from 2,4-dimethoxypyrrolo[2,3-d]pyrimidine.
IT 132160-44-2P, Rigidin
RL: SPN (Synthetic preparation); PREP (Preparation)
(total synthesis of)
RN 132160-44-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxybenzyl)-5-(4-hydroxybenzyl)- (CA INDEX NAME)



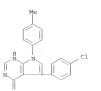
OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L4 ANSWER 58 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:124857 CAPLUS
DOCUMENT NUMBER: 118:124857
ORIGINAL REFERENCE NO.: 118:21665a,21668a
TITLE: Synthesis of a novel pyrrolo[2,3-d]pyrimidine alkaloid, rigidin
AUTHOR(S): Edstrom, Eric D.; Wei, Yuan
CORPORATE SOURCE: Dep. Chem. Biochem., Utah State Univ., Logan, UT, 84322-0300, USA
SOURCE: Journal of Organic Chemistry (1993), 58(2), 403-7
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 118:124857
GI



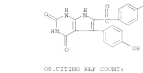
AB An efficient nine-step synthesis of the brain phosphodiesterase inhibitor, rigidin, (I) was accomplished in 26% overall yield starting from 6-chlorouracil and Et (2,4-dimethoxybenzyl)glycinate. A key feature of the synthetic route reveals a new method for the annulation of pyrrole rings onto pyrimidine rings starting from 6-chlorouracils and N-benzylglycine sodium salts. Thus, initial condensation adducts II [R = R1 = PhCH2; R = PhCH2CO2Et, R1 = 2,4-(MeO)2C6H3CH2] were converted into 5-acetoxypyrroles III (R1 = Ac) upon warming in acetic anhydride. The readily derived 5-trifluoromethanesulfonoxy materials III [R = R1 = PhCH2; R = PhCH2OCH2, R1 = 2,4-(MeO)2C6H3; R2 = PhCH2] undergo palladium-catalyzed cross couplings with arylzinn reagent 4-PhCH2OC6H4Sn3n2 and afford C-5 aryl compds. IV. Acylation at the C-6 position in IV was best effected using a mixed anhydride reagent derived from 4-PhCH2OC6H4CO2H and trifluoroacetic anhydride. The optimal route to ridigin involved a one-pot deprotection procedure of uranyl screen trimethylsilyl iodide followed by heating in water
IT 132160-44-2P, Rigidin
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of)

L4 ANSWER 56 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(4-chlorophenyl)-3,7-dihydro-7-(4-methylphenyl)- (CA INDEX NAME)



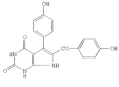
OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

L4 ANSWER 59 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 132160-44-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxybenzoyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 23 THERE ARE 23 CAPLUS RECORDS THAT CITE THIS RECORD (23 CITINGS)

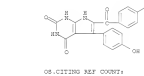
L4 ANSWER 59 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1991:98591 CAPLUS
DOCUMENT NUMBER: 114:98591
ORIGINAL REFERENCE NO.: 114:16747a,16750a
TITLE: Rigidin, a novel alkaloid with calmodulin antagonistic activity from the okinawan marine tunicate Eodistoma cf. rigida
AUTHOR(S): Kobayashi, Junichi; Cheng, Jue Fei; Kikuchi, Yuniko; Ishibashi, Masami; Yamamura, Shoroku; Ohizumi, Yasushi; Ohta, Tomihisa; Nozoe, Shigeo
CORPORATE SOURCE: Fac. Pharm. Sci., Hokkaido Univ., Sapporo, 060, Japan
SOURCE: Tetrahedron Letters (1990), 31(52), 4617-20
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

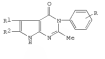
AB A novel pyrrolopyrimidine alkaloid, rigidin (I) with calmodulin antagonistic activity was isolated from the Okinawan marine tunicate E. rigida. The structure was elucidated on the basis of spectral data of I and its pentamethyl derivative
IT 132160-44-2, Rigidine
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(of tunicate, isolation and mol. structure and calmodulin antagonistic activity of)
RN 132160-44-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxybenzoyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)

L4 ANSWER 59 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



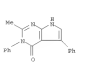
OS.CITING REF COUNT: 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (20 CITINGS)

L4 ANSWER 60 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1990:515236 CAPLUS
DOCUMENT NUMBER: 113:115236
ORIGINAL REFERENCE NO.: 113:19527a,19530a
TITLE: Phosphorus pentoxide in organic synthesis. XXXX. Synthesis of 3-aryl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-ones
AUTHOR(S): Hilmy, Khalid Mohamed Hassan; Nogensen, Jorgen; Jorgensen, Anker; Pedersen, Erik B.
CORPORATE SOURCE: Dep. Chem., Odense Univ., Odense, DK-5230, Den.
SOURCE: Heterocycles (1990), 31(2), 367-72
CODEN: HTCYAM; ISSN: 0385-5414
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 113:115236
GI

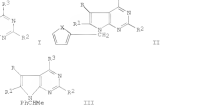


I

AB Title compds. I (R = H, 4-Me, 3-F, 4-Cl, 3-Cl, 3-CF3, etc.; R1 = Me, Ph; R2 = H, PhCH2) were prepared in 18-51% yields by heating 2-(acetylamino)-3-pyrrolecarbonitriles with a mixture of P2O5, N,N-dimethylcyclohexylamine hydrochloride, water, and an appropriate arylamine hydrochloride at 180°.
IT 129158-02-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 129158-02-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-2-methyl-3,5-diphenyl- (CA INDEX NAME)



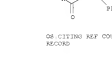
L4 ANSWER 61 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:172397 CAPLUS
DOCUMENT NUMBER: 105:172397
ORIGINAL REFERENCE NO.: 105:27792a,27792a
TITLE: Synthesis of 7-unsubstituted 7H-pyrrolo[2,3-d]pyrimidines
AUTHOR(S): Fischler, Herbert; Folkers, Gerd; Roth, Hermann J.; Sper, Fritz
CORPORATE SOURCE: Pharm. Inst., Univ. Bonn, Bonn, D-5300, Fed. Rep. Ger.
SOURCE: Liebigs Annalen der Chemie (1986), (9), 1685-505
CODEN: LACHDL; ISSN: 0170-2041
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 105:172397
GI



AB Pyrrolopyridines I [R,R1 = Me, Ph; R2 = H, NH2; R3 = OH, NH2, Cl, NHAc, NAc2, NHCOEt, N(COEt)2] were obtained by N-7 dealkylation of the 2-furanylmethyl, 2-thienylmethyl, or 1-phenylethyl group from furans II [R = O, S] and styrenes III with polyphosphoric acid. In contrast to the 2-furanylmethyl group the 2-thienylmethyl and 1-phenylethyl groups were removed independently of the substitution of II and III.
IT 107026-17-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and furylmethyl cleavage of, with polyphosphoric acid)
RN 107026-17-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(2-furanylmethyl)-3,7-dihydro-5,6-diphenyl- (CA INDEX NAME)

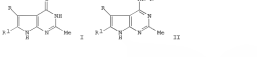
L4 ANSWER 62 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1985:650132 CAPLUS
DOCUMENT NUMBER: 103:6132
ORIGINAL REFERENCE NO.: 103:1103a,1106a
TITLE: Phosphorus pentoxide in organic synthesis; XI. A new synthetic approach to 7-deazahypoxanthines
AUTHOR(S): Girgis, Nabih S.; Joergensen, Anker; Pedersen, Erik B.
CORPORATE SOURCE: Dep. Chem., Odense Univ., Odense, DK-5230, Den.
SOURCE: Synthesis (1985), (1), 253-6
CODEN: SYNTBF; ISSN: 0039-7881
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 103:6132
GI

AB Treatment of the aryliminopyrrolecarbonitriles I [R = H, Ph; R1, R2 = Me, Ph; R3 = H, CHPh, CH2CHMe2, Me; R3R3 = (CH2)4] with P2O5 and N,N-dimethylcyclohexylamine in H2O gave 57-76% deazahypoxanthines II, whereas treatment with H3PO4 gave the carbenamides which cyclized to II on heating. II (R = Ph, R= = CF3, R2 = R3 = Me) was obtained directly by both methods.
IT 85927-52-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 85927-52-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-2-methyl-5-phenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L4 ANSWER 63 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1985:166693 CAPLUS
DOCUMENT NUMBER: 102:166693
ORIGINAL REFERENCE NO.: 102:26209a,26212a
TITLE: Phosphorus pentoxide in organic synthesis; XII. Synthesis of 7H-pyrrolo[2,3-d]pyrimidin-4-amines
AUTHOR(S): Joergensen, Anker; Girgis, Nabih S.; Pedersen, Erik B.
CORPORATE SOURCE: Dep. Chem., Odense Univ., Odense, DK-5230, Den.
SOURCE: Liebigs Annalen der Chemie (1985), (1), 142-8
CODEN: LACHDL; ISSN: 0170-2041
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 102:166693
GI

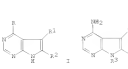


AB Reductive amination of pyrrolopyrimidinones I (R, R1 = Me, H; R2 Ph, H; Me, Me2CHCH2; Me, PhCH2) was carried out with, resp., arylamines R2R3NH (R2 = H, R3 = Ph, 4-FC6H4, 3-MeC6H4, 2,6-Me2C6H3) and alkylamines (R2, R3 = Pr, H; Me, Me; Et, Et) to give, resp., 46-90 and 15-56% amines II.
IT 85927-52-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(reductive amination of)
RN 85927-52-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-2-methyl-5-phenyl- (CA INDEX NAME)

L4 ANSWER 64 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1982:493206 CAPLUS
DOCUMENT NUMBER: 97:93206
ORIGINAL REFERENCE NO.: 97:15389a,15390a
TITLE: Pyrrolopyrimidines and their use in production of biologically effective substances
INVENTOR(S): Gaenzler, Hairedin; Roth, Hermann Josef; Kger, Kurt; Pichler, Herbert
PATENT ASSIGNEE(S): Troponwerke G.m.b.H. und Co. K.-G., Fed. Rep. Ger.
SOURCE: Ger. Offen., 20 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3036796	A1	19820513	DE 1980-3036390	19800926
PRIORITY APPLN. INFO.:			DE 1980-3036390	19800926

OTHER SOURCE(S): CASREACT 97:93206
GI



AB Pyrrolopyrimidines I (R = H, NH2, OH, halo, SH, alkylthio, alkoxy, alkyl, aralkyl, aryl, furfurylamino, alkyl (un)substituted with halogen, aryl (un)substituted with halogen, alkyl, CF3, alkoxy; R1, R2 = alkyl, Ph (un)substituted with halogen, CF3, alkyl, alkoxy; NR2 = alkyl (un)substituted Cl-5 alkylene), useful as the title intermediates, were prepared Dealkylating II (R3 = PhCH2Me) with polyphosphoric acid at 60° in 2 h and hydrolyzing the product gave 93.6% II (R3 = H).
IT 82702-47-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(dealkylation of)
RN 82702-47-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,6-diphenyl-7-(1-phenylethyl)- (CA INDEX NAME)

L4 ANSWER 64 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

IT 82703-37-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 82703-37-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,6-diphenyl- (CA INDEX NAME)

OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

L4 ANSWER 65 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1982:155147 CAPLUS
DOCUMENT NUMBER: 96:155147
ORIGINAL REFERENCE NO.: 96:25350a,25354a
TITLE: The antitumor and marmalian xanthine oxidase inhibitory activity of 5-methyl-6-substituted pyrrolo[2,3-d]pyrimidine-2,4-diones
AUTHOR(S): Beelah, Charles J., Sowell, J. Walter, Sr.
CORPORATE SOURCE: Coll. Pharm., Univ. South Carolina, Columbia, SC, 29208, USA
SOURCE: Journal of Pharmaceutical Sciences (1982), 71(2), 269-70
CODEN: JPMSAE; ISSN: 0022-3549
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

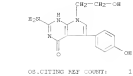
AB Six pyrrolo[2,3-d]pyrimidine-2,4-diones I (R = Me, Et, Ph, etc.) were tested in vitro as inhibitors of xanthine oxidase [9002-17-9] and compared with allopurinol (II). Only 2 of the compds. tested showed inhibition. I (R = Ph) [72211-16-6] had the most activity but it was low compared to II. When the antitumor activity of I (R = Me) [72185-72-9] was tested in vivo against 2 transplantable mouse lymphoid tumor systems the compound appeared to be toxic.
IT 72211-16-6
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(xanthine oxidase inhibiting activity of)
RN 72211-16-6 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 5-methyl-6-phenyl- (CA INDEX NAME)

L4 ANSWER 66 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1982:52262 CAPLUS
DOCUMENT NUMBER: 96:52262
ORIGINAL REFERENCE NO.: 96:8613a,8616a
TITLE: Pyrimido[4,5-c]pyridazines. 4. Cyclizations with α-oxo acids
AUTHOR(S): Styles, Virgil L.; Morrison, Robert W., Jr.
CORPORATE SOURCE: Wellcome Res. Lab., Burroughs Wellcome Co., Research Triangle Park, NC, 27709, USA
SOURCE: Journal of Organic Chemistry (1982), 47(3), 585-7
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 96:52262
AB The simple α-oxo acids (pyruvic and phenylglyoxylic) are as useful as their esters for the preparation of pyrimido[4,5-c]pyridazine-4,5(1H,6H)-diones from 6-(1-alkylhydrazino)isocytosines (I). Phenyl- and (p-hydroxyphenyl)pyruvic acids cyclize with I in refluxing H2O to give 5-aryl-7-alkylpyrrolo[2,3-d]pyrimidines in modest, but synthetically useful, yields. However, alkylation of the hydrazine substituent of I appears to be necessary for either type of cyclization.
IT 80042-18-9P 80042-19-0P 80042-20-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 80042-18-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-3,7-dihydro-7-methyl-5-phenyl- (CA INDEX NAME)

RN 80042-19-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-7,7-dihydro-5-(4-hydroxyphenyl)-7-methyl- (CA INDEX NAME)

RN 80042-20-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-7,7-dihydro-7-(2-hydroxyethyl)-5-

L4 ANSWER 66 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(4-hydroxyphenyl)- (CA INDEX NAME)

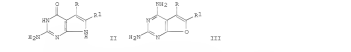


OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

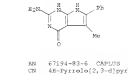
L4 ANSWER 67 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1980:22451 CAPLUS
DOCUMENT NUMBER: 92:22451
ORIGINAL REFERENCE NO.: 92:3821a,3824a
TITLE: Synthesis of substituted pyrrolo[2,3-d]pyrimidine-2,4-diones
AUTHOR(S): Elson, Sandra Kay; Mutton, Ronald J.; Sowell, J. Walter, Sr.
CORPORATE SOURCE: Coll. Pharm., Univ. South Carolina, Columbia, SC, 29208, USA
SOURCE: Journal of Heterocyclic Chemistry (1979), 16(5), 929-33
CODEN: JHETAO; ISSN: 0022-152X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 92:22451
GI

AB Pyrrolopyrimidinediones I (R = H, R1 = Me, Et, CH2CHMe2, Ph, CH2Ph, CH2C6H4OH-4; R = R1 = Me) were obtained by treating II (R2 = R3 = CN) with C1CO2Et, hydrolyzing II (R2 = CO2Et, R3 = CN), and cyclizing II (R2 = CO2Et, R3 = CONR2) in octanol or with KOCMe3 in THF.
IT 72211-16-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 72211-16-6 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 5-methyl-6-phenyl- (CA INDEX NAME)

L4 ANSWER 68 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1978:580272 CAPLUS
DOCUMENT NUMBER: 89:180272
ORIGINAL REFERENCE NO.: 89:28015a,28018a
TITLE: Studies directed toward a total synthesis of nucleoside Q. Annulation of 2,6-dianilopyrimidin-4-one with α-halo carbonyls to form pyrrolo[3,2-d]pyrimidines and furo[2,3-d]pyrimidines
AUTHOR(S): Seeniar, John A., III; Liu, Paul S.
CORPORATE SOURCE: Dep. Chem., Ohio State Univ., Columbus, OH, USA
SOURCE: Journal of Organic Chemistry (1978), 43(20), 3937-41
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



AB The condensation of 2,6-dianilopyrimidin-4-one (I) with RCHXCOR1 [R = H, Me, Ph, PhCH2; R1 = Me, EtOCH2CH2, Ph, C1CH2; RR1 = (CH2)4; X = Cl, Br] to give pyrrolo[2,3-d]pyrimidin-4-ones II and furo[2,3-d]pyrimidines III was studied. The reaction was regiospecific. For example, the reaction of I and C1CHXCOMe gave II (R = H, R1 = Me) and III (R = Me, R1 = H), whereas I and MeCHClCHO gave II (R = Me, R1 = H) (IV), exclusively. The IV is contained in nucleoside Q.
IT 67194-82-5P 67194-83-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 67194-82-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-3,7-dihydro-5-methyl-6-phenyl- (CA INDEX NAME)



RN 67194-83-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-3,7-dihydro-6-methyl-5-phenyl- (CA INDEX NAME)

L4 ANSWER 68 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

OS.CITING REF COUNT: 31 THERE ARE 31 CAPLUS RECORDS THAT CITE THIS RECORD (31 CITINGS)

L4 ANSWER 69 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1975:43321 CAPLUS
DOCUMENT NUMBER: 82:43321
ORIGINAL REFERENCE NO.: 82:6897a,6902a
TITLE: Pyrrolo[2,3-d]pyrimidines. Synthesis from 4-pyrimidylhydrazones, a 2-bis(methylthio) methyleneaminopyrrole-3-carbonitrile, and a pyrrolo[2,3-d][1,3]thiazine-2(1H)-thione
AUTHOR(S): Duffy, Thomas D.; Wildeley, S. George
CORPORATE SOURCE: Dep. Pharm., Univ. Aston, Birmingham, UK
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1974), (16), 1921-9
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB 2-Amino-4-phenylpyrrole-3-carbonitrile with CS2 gave the pyrrolothiazinethione I, which with amines gave 3-substituted derivs. e.g., I with RNH2 gave 8C4 II and 4C4 III. Hydrazones IV and V in [BO(CH2)2]2O gave imMoles VI and VII, resp. Hydrazones VIII-X cyclized similarly on heating. 2-[Bis(methylthio)methyleneamino]-4-phenylpyrrole-3-carbonitrile with amines gave 88-99% of the corresponding 4,7-dihydro-7-alkyl-4-imino-2-methylthio-5-phenyl-3H-pyrrolo[2,3-d]pyrimidines.
IT 54760-39-0P 54760-45-1P
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
RN 54760-28-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3-ethyl-1,2,3,7-tetrahydro-5-phenyl-2-thioxo- (CA INDEX NAME)

RN 54760-45-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 1,2,3,7-tetrahydro-3-methyl-5-phenyl-2-thioxo- (CA INDEX NAME)

L4 ANSWER 69 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)